

# MUNICIPAL AFFAIRS.

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## EDITORIAL.

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Within the last ten years the growing importance and constantly increasing value of public franchises have made people pause and ask whether the methods of granting rights to use public property, the compensation exacted and the restrictions imposed have been such as to preserve and protect the rights of the public. The feeling has also grown that franchises should not be granted to private companies, but that the city itself should construct and operate its system of water supply, its gas and electric lighting plants, its street railways and its telephones.

Although cities have performed, from their very first appearance upon the stage of history, functions which some persons are inclined to call business or industrial as distinguished from purely governmental, and although in every country of Europe and America a considerable proportion of the water systems, and the gas and electric lighting plants have been operated by municipalities, not to mention the very marked tendency toward public operation of telephones and street railways, there has not been until quite recently a thorough consideration of the problems of municipal ownership and public franchises.

Prior to 1890 very little had been written and comparatively few persons appreciated the immense importance of the franchises which were being given away by our city authorities in perpetuity and for an infinitesimal compensation. The small number of persons who urged the folly of such a course and who argued in favor of municipal ownership were called theorists and dreamers and the franchise problem was declared to be an academic one. If it were ever true that the discussion were merely academic, that stage has now been passed.

Realizing that the time had come when the question must be considered on its merits, that the assumption upon the part of municipalists that public operation was *a priori* a desirable platform or of the

extreme individualists that all public activity was to be deprecated, and that the great need was a fair discussion and a straight-forward statement of the facts, the Reform Club Committee on City Affairs issued, in the Fall of last year, a call for a national convention upon Municipal Ownership and Public Franchises. Every interest was asked to send its most able representative. The various organizations interested in the question were invited to send delegates. The managers and engineers connected with what are ordinarily known as municipal monopolists were asked to be present and to take an active part in the Convention, the idea being to make the Convention thoroughly practical, to get at the facts and to gather the opinions of business men as well as those of economists and public officials.

The Convention met in the Assembly Room of the Reform Club on February 25th, 26th and 27th, 1903, at which time were present delegates representing every section of the United States, Canada and a few foreign cities, including Mr. Charles R. Bellamy, manager of the Liverpool Municipal Street Railways, who came to the United States specially to attend the Convention. This number of MUNICIPAL AFFAIRS contains the papers read and a stenographic report of the discussions.

The Convention was the first of national scope upon this subject, and was so largely attended and brought forth such wide comment and discussion in periodic literature that it will probably be followed by others. The facts presented will, we believe, help to clarify the atmosphere, although the questions are of such complex nature and there is such a variety of opinion regarding the wisest solution that they must attract in the future even wider attention than they have in the past.



## THE PROBLEM OF MUNICIPAL OWNERSHIP.

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BY JOHN G. AGAR.

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The conditions in American cities to-day are such as to make the thoughtful and patriotic seek some method of improvement. Taking New York as an instance, generally speaking, the transportation services are limited and inadequate, the lighting services are extravagantly carried on, the telephone services are becoming overworked, and all the material conditions of government appear to be behind the demands of the vast population in this city.

These conditions probably arise largely from the fact that the methods of city administration here and elsewhere in the United States have been limited by political issues, that is, the instruments of administration and the mode of application have been chosen and controlled with reference to their influence on political party policies. It is apparent that the enormous aggregation of municipal activities cannot longer be exercised in this country so as to give citizens the required minimum of municipal comfort and satisfaction unless another method of administration be applied.

The ways sought to remedy the many evils upon us are various. In the first place, it has been suggested that all instruments which go to satisfy communal wants should be owned, controlled and operated by the municipal corporation, without regard to profit, for the sole benefit of the residents of the municipality. This includes all the manifold activities which go to satisfy communal wants, such as transportation of both persons and property, providing means of intercourse by messenger service, telephone service and telegraph service, lighting, heating and cleaning the city, providing public schools, libraries and baths, furnishing proper food through bakeries and markets, etc., caring for the sick through hospitals and infirmaries, and finally burying the bodies of the dead and maintaining the cemeteries.

Another method has been proposed, and in some instances carried out, to allow the city to own the property through which the activity is carried on, but to allow private individuals to carry on the activity for private profit. And still another method has been for the city to exercise control over the industries which supply communal wants by requiring publicity of accounts and limiting the amounts which may be charged for any given service. The method which is most commonly applied in this country is that of supplying municipal wants very largely by means of private ownership and enterprise for private profit.

It must not be supposed that the Reform Club in organizing this convention and inviting the interchange of views on these subjects means to profess any opinion on the principles involved. But the Club in seeking the largest expression of opinion from all its guests hopes to amass such a number of facts that it will be easier hereafter to form a definite conclusion on many points which have heretofore been beyond determination. One difficulty, if not the main difficulty, in forming an opinion as to the best method of promoting efficiency in supplying communal wants, has been the absence of the evidences of experience. It has been, and is, extremely difficult to obtain a record of municipal work done abroad and in this country in such form as to allow one to make an inference therefrom, or in such detail as would justify one municipality in applying to itself the experiences of another.

This Convention has been called for the purpose of furnishing in some degree such facts and information, and of organizing, if possible, a permanent bureau for the collection and distribution of such municipal statistics relating to the best methods of supplying communal wants.

In using the statistics obtained from foreign experience we must bear in mind that all satisfactory municipal development, whether it be in Germany or in England, in France or in Belgium, or Austria, is based upon the idea that the administration of city government has no rational connection with national governmental policies, that the satisfaction of communal wants depends upon the local adjustment of means to ends by the choice and use of the fittest agents. On the other hand, if we study American municipal experience, we discover that the most unsatisfactory municipal results are obtained where the choice of municipal officers or agents is made to depend upon or to be connected

with national or state policies, having no relation to the satisfaction of municipal wants. In other words, whenever we find by experience that municipal agents are chosen for the sole purpose of satisfying municipal wants, those wants are fairly well satisfied, and whenever municipal agents are chosen because of other unrelated matters, those wants are inadequately provided for or are entirely unsatisfied.

It may be concluded, therefore, as a condition fundamental and precedent, that no proper efficiency has been or may be obtained in supplying communal wants by means of public activities unless the agents chosen to do the public work are chosen for the sole reason of their efficiency to do that particular work and without relation to their opinions on unrelated questions of state governmental politics. It would be as reasonable to choose an astronomer because he is an astronomer to lecture on corporation law, as to choose a protectionist because he is a protectionist, to clean the streets, run the street cars, and to provide, regulate or distribute the water supply of the city.

It may be further concluded that the experience of communities where public agents are chosen for their efficiency may not be applied with absolute aptness to those communities where unfit public agents are chosen to perform communal or municipal work. Therefore, in listening to the experiences of foreign countries we must always bear in mind that the conditions under which the municipal activities are exercised abroad are entirely distinct from the conditions under which they are exercised in this country. There expert public servants are chosen because of their fitness; here, generally, public servants are chosen on account of political or other expediencies.

As a further conclusion it appears that even if it be proven that ultimately the best interests of the community require the ownership and operation of its public activities by the municipality, the first step in that direction should be made by the adoption of the principle universally applied elsewhere, that only fit persons should be chosen to do the public work.

In applying the lessons of foreign experience to American cities, we must further bear in mind that the principle of the least governmental interference in public affairs is one very dear to the American mind and one which contains in itself the essential ideas of American public policy, the ideas which distinguish American public activities from those of any other nation, and which have made our government

and institutions a system different from that of any other nation in history. There must be alleged very good reasons to convince an American that a radical departure from such a system is necessary and proper in any sphere of our public life.

Granting that a complete absorption by local governments of all public utilities and quasi-public utilities would result in greater efficiency and economy—and this, I confess, is not clear to my mind—it must not be forgotten that a large army of public employees would be required to manage these enterprises, whose tenure of office would be perpetual. If this practice be carried out to its fullest extent, would not such an enormous number of men be required perpetually in public service as to make the government odiously omnipresent and dangerously paternal? Would not this be the beginning of a system of socialism? And if so, ought we not understand the full meaning of our acts before we take the first steps?

I make these suggestions now more to outline the principles at issue in the discussions which are to follow than to suggest reasons for or against any of the propositions which may be advocated during the convention.

My hope and expectation is that, before these meetings close, such a mass of facts may be produced that all of us may have the sure materials for a sound judgment on the important subjects discussed. There is no worthier object for this club, or any other public or private institution, to strive after.

## MUNICIPAL OPERATION NEEDED TO CORRELATE LOCAL FRANCHISES.

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BY JOHN DE WITT WARNER.

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### The Drift of Events.

Until very lately, in dealing with the problem of municipal operation (as well as ownership or control) of local franchises, social or political considerations were given most weight. Cities have far most frequently undertaken to operate one or another franchise—water, gas, railroads, etc.—because driven thereto by such depravity of service or corruption of politics by franchise corporations as left Scylla no terrors to those who thus fled from Charybdis. Or, against every argument of public convenience or profit, they have created or renewed private monopoly, in order to avoid "Socialism"—not merely the real thing, which many fear who do know it, but the bogey that water, gas, electric light, street railway and other corporations have of late so horribly painted as to scare timid citizens withal.

For the last two or three years here, however, and somewhat longer than that in Great Britain—whose circumstances and needs are most like ours—these considerations have lost their vogue. To be sure, they are still mooted, and sometimes sincerely so. Few, however, except those whom other motives also prompt, now decry the socialism involved in a city using its own instead of compromising between public weal and private gain; and fewer yet would promote municipal socialism at any net loss or inconvenience to themselves or their city.

Of late, therefore, choice between city service and private monopoly has more and more generally turned on the judgment of the voters as to the business economy involved. And against the tardiness with which municipal operation has been tried by our cities must be offset the success that has so generally justified such trials as have been made. Were this the only result of conservatism it might be well to let well enough alone and not to spur progress.

But a more serious factor has developed. The advantage of combining as many public franchises as may be under one control has appeared so obvious to private capital, and it has been so well appreciated that its remaining favors must be secured before our public is equally awake, that attempts to forestall the freedom of our cities for generations to come, by monopoly so aggregated as to extend its own control and thwart all other, are the characteristic of our city problems, if not, indeed, their most threatening factor.

It is less than five years since the now Metropolitan system seemed likely to succeed in combining the street railways of Manhattan. But three years ago it already so dominated the situation that our city Rapid Transit Commission advised the state legislature that no other agency could well rival it, and asked for legal power to hand Manhattan over to this energetic concern. This now astounding position was then favored by nearly the entire press of this city, and was thwarted only by the determined opposition of the Citizens' Union and the Local Federation of Labor.

A year later it was pointed out by Mr. Bowker, late Vice-President of the Edison Company, that the Metropolitan coterie then controlled not merely the street railways, but the gas, electric light and power supply, and he might have added the stage routes—of Manhattan.

About two years since, also, our Rapid Transit Commission was anxious lest there might be no bidders for the first routes it had planned. Only a year later it was busily laying out new ones to meet the views of the Belmont syndicate, which had received the first franchise. The present elevated and the to-be underground systems are now pooled; the Brooklyn transport lines have been aggregated and are now coalescing with the larger mass, in which the Metropolitan also is finding its place. Finally, we have just had reported from our Rapid Transit Commission such a scheme for both subway and elevated roads to be built by the city, but operated by private monopoly, as would indefinitely foreclose the situation, and clearly indicates as behind the new plans the same syndicate that has secured the old ones.

In short, it is now clear not merely that private capital is thoroughly awake to the advantages of combining ownership of various franchises, and co-ordinating varied public services; but that well-planned attempts are now making to secure for a certain financial coterie a public service monopoly here.



### The Present Danger.

So far as concerns mere length of term, it is to be hoped our people are sufficiently roused never again to tolerate 75-year cessions to street subways, or perpetual easements to others. Important, therefore, as it is to avoid contracts that may at any time seriously delay the city in using its own as it sees fit, the most critical point remaining has seemed to me not this one, but the growing danger that—with private corporations awake and the city asleep to the extent to which the possessions of one franchise is a lever by which others may be gained or held—grants to private monopolies may sacrifice far more important public interests than those directly involved.

To illustrate: Even were it true (as I do not believe it is) that any private subway railroad corporation is likely to give as good and cheap transit over a given route as the city itself could and would do, it might still be wasteful to permit it to do so unless it were prudent at the same time to include therewith many other franchises. And, whatever may be said for the beneficent rule of capital in any one line of city concerns, there are too many public uses to be subserved by our franchises, such as should not be left to a business corporation, to make this rule tolerable.

Take transport facilities alone. As used in this city we now have more than thirty varieties, nearly all of these under local jurisdiction, and the rest necessarily used with reference to local conditions. They include (1) street uses, (2) boulevard facilities, (3) bridges, (4) sub-river tunnels, (5) ferries, (6) sewers, (7) docks, (8) depots, (9) general railroad passenger service, (10) general freight service, (11) elevated passenger service, (12) elevated freight service, (13) street railway passenger service, (14) street railway freight service, (15) subway passenger service, (16) subway freight service, (17) subway sidewalk service, (18) mail letter service, (19) newspaper and package service, (20) express service, (21) gas supply, (22) electric light supply, (23) electric power supply, (24) heat supply, (25) water supply for personal use, (26) water for street cleaning and fire use, (27) water for power, (28) pneumatic service, (29) stage service, (30) messenger service, (31) telegraph service, (32) telephone service.

The list is certain steadily to increase in number, variety and intimate relations to the life of our citizens, so that most of the considerations below noted will apply with even greater force to coming conditions than to present ones.



New special uses will also constantly develop for which provision must be made; and many of what have heretofore been considered general uses will either become so specialized as to require franchise rights, or will so crowd each other as to compel choice between those to be favored as general uses and those to be regulated as special ones. For example: One reason for including streets in the above list is that it is even now plain that to a great and increasing extent they can properly accommodate only pedestrians and ordinary wheel traffic, so that (in some parts of Manhattan, at least) we now face the question whether the surface must not be preserved for these uses, and other provision made, probably by subways, for street railroads, freight cartage and other uses that now so congest many streets as to ruin them, not merely for other uses, but for themselves as well.

#### Local Franchises should be Correlated.

The first and most obvious conclusion is that these uses are naturally *inter-related*; and that they should be *correlated*.

(a) *Present methods disorderly and inefficient.*—Of this interrelation we have never lacked forcible and unpleasant reminders. For twenty-five years, at each end of the Brooklyn bridge, conditions have presented one after another case of grotesque depravity, each appreciated by all as disgraceful—each more idiotic, dangerous and unprofitable than the most stupid or greedy of the factors concerned would have planned if left to itself.

In every quarter squabbles of conflicting street railways have accustomed us to private war, with feudal gangs, midnight attacks, trenches opened and filled in our streets, rails laid one day and torn up the next, ending by truces in which the fighting corporations pool their issues and unite against the public.

But shortly since we saw our principal street, Fifth avenue, first torn up for miles for gas, water or sewers; then, before this was finished, ripped up deeper for another of these; then, when partially filled, opened again to its depth for the third; and *even then so left that*—after two years of continuous disturbance—it must again be torn up whenever either of these services needs material repair or renewal.

Within the last month we have seen the tardy placing of street signs further delayed by squabbles between city authorities and the private corporations who claim to control our street lamp posts, involving wan-

ton destruction of property, varied by assault and battery, and swelling our daily police records; while the public swore and bore it. Even now a pitched battle is waging between the "moving sidewalk" and "Brooklyn Rapid Transit" companies, to settle by what facilities New York shall be permitted to reach the Williamsburg bridge.

Millions are spent at Battery and Central parks for beauty as well as air and light; and then—by such junk trestles as sprawl about the battery and sheet-iron shanties as that which faces the Seventh avenue entrance to Central Park—the elevated roads spoil the city's investments. In short, such examples of what would be made impossible by any proper solution of the problem are too common to need further mention.

(b) *Economy requires combination.*—The question of economy is, if possible, even more directly involved than decency and efficiency in public service.

Our street and elevated railroads have somewhat taught us how cheaply by combination public convenience can be met, with such resulting increase of demand as to add to the profit in supplying it. In other directions, too numerous to mention, economy may be subserved by utilizing a single expenditure for many purposes. If, for example, tunnels are needed for sub-surface street railways, it is clearly economy to provide at the same time, with little added expense, ducts for heat, light, power, telephone, telegraph, pneumatic and other uses. It is equally clear that, by additional slight expenditure, gas, water and sewer mains should be added to those to be provided for by such subways or reached from them. The saving by leaving street surfaces undisturbed, and by the ideal facility with which waste of supply could be detected and repairs made, would be of incalculable value to the city.

Again, as in private affairs, the value of many a public service depends upon its combination with others. For example, the investment in our parks—inland, sound, shore and seaside—and our great libraries, gardens and museums—art, natural history, botanical, zoological, marine—would be worthless except for the access now provided; and are but partially used (and hence a great part of our investment lost) from lack of facilities to reach them. In many ways, of which millions of our people would promptly take advantage, concessions in rate of fare, extension of track or better connections, which might not quite repay street railways, *as such* (though in fact they would fre-

quently do so), might be the most economic expenditure possible of the moderate amount that might double or quadruple our return (in the pleasure, comfort, health and culture of our citizens) from the scores of millions put into these institutions; which, from lack of better ways to reach them, are now left "wrapped in a napkin."

We are expending tens of millions on our high schools, normal schools, city colleges, etc., and still greater amounts in (capitalized) annual appropriations to run them. In the very nature of things they cannot be set in every neighborhood. Of the thousands of students in these higher schools the instruction of each costs the city \$200 a year on the average. This may not be too much, but it is so great that economy in use of public funds demands that no pains be spared to secure for this instruction those best fitted to profit by it. Suppose that all students in these were entitled to free or reduced fares to and from their schools? Would not many more bright boys and girls, thus relieved of the \$10 to \$25 annual expense that to them means so much, use the instruction that (at ten-fold that cost) the city now offers only to those who can afford the petty expense that now obstructs acceptance.

(c) *Health and order served by union.*—Finally (omitting many another instance): If, by perfecting transit connections, street car fares could be reduced, say to two tickets for five cents to or from any part of the greater city, and the ordinary time to a half-hour maximum, not merely would this enable every wage earner freely to choose his place of residence, but the result would probably be so profitable as to permit still lower rates and still better time. Any temporary loss would prove the greatest of saving in the cost of our departments of health, correction and police—to say nothing of the better homes in which shall live our wage earners of to-day, and be reared the children that in the near future will constitute all classes of our citizens.

#### Combination Inevitable.

It is true that at the worst matters do get slowly better. But, as already illustrated, under present conditions of reliance on corporate interests to exploit our franchises, progress is halting, and its steps wasteful alike of comfort, public order and money, not to mention the political corruption and demoralization that has proved characteristic of our present system. Indeed, there has long since been no question but that

the public franchises of a great city should be under one management. Nor can there be any question but what they must be so. For, as our own late experience shows, *if left to private interests these will combine—until they operate, control or dictate to the aggregate thus brought under one hand.*

To show the paradise toward which we are drifting, I quote the following from the *Tribune*, a newspaper which, in this matter, has been always characterized by great conservatism:

### "IN STANDARD'S HANDS.

#### *"Progress in its Plans.*

"It is learned on excellent authority that important progress has recently been made in the evolution of the plans which the Standard Oil interests have long been credited with having formed for controlling the transportation and lighting business of the metropolis. These interests have for years controlled the Consolidated Gas Company, which, since its purchase of the New Amsterdam Gas Company, the Standard Gas Light Company and the New York Gas and Electric Light, Heat and Power Company, in 1900, has had a monopoly of the gas and electric-lighting business of this borough. The Brooklyn Union Gas Company, which furnishes all the gas used in Brooklyn, is also dominated by the Standard Oil interests, and it is understood that this corporation is within the immediate future to take over the Kings County Electric Light and Power Company, which is a consolidation of the electric-light companies of Brooklyn, and which is controlled by Anthony N. Brady, a director of the Consolidated Gas Company, and his friends—a transaction which would make the Brooklyn Union Gas Company supreme in its field, as the Consolidated Gas Company is without a competitor in this borough. \* \* \*

"In addition to the practical unification, under Standard Oil control, of the gas and electric interests of the two boroughs, there is also good reason, it is declared, for believing that the Rockefeller interests are now, to all intents and purposes, masters of the street railway business of the Borough of Manhattan. Since the formation of the Metropolitan Securities Company last spring the direction of the surface railway system of the Metropolitan Street Railway Company has lain principally with Kuhn, Loeb & Co., whose relations with the Standard Oil party, as well as with the Pennsylvania Railroad Company, are close. The recent transfer of the Manhattan Railway Company control to the Interborough Rapid Transit Company, it is understood, on what should be good authority, was financed with the direct co-operation of the Standard Oil group, who, it is said, furnished the money necessary to purchase the control of the elevated system from President George J. Gould and his associates, and who now, it is believed, are the dominant interests in the combined subway and elevated traction system of the boroughs of Manhattan and The Bronx, as well as of the surface system.

"Whether or not the plans of this powerful group of capitalists include the ultimate acquisition of the Brooklyn Rapid Transit system cannot yet be told."

—One might as well say that whether the sun will rise to-morrow "cannot yet be told."

On both experience and theory it is not practicable, so long as public franchises are parcelled among unrelated and conflicting interests to expect or secure either harmonious or effective public service. Nor is our experience unique. On the contrary, it is that of every city where attempt has been made to meet modern demands for public

service. In London, the one city where conditions most nearly approach ours (in spite of the extent to which, in late years, more urgent needs have been met by contracts on terms which would assure efficiency and harmony far beyond what we have yet secured) it is now appreciated in the light of such melees as that in which two distinguished New Yorkers have just contended there, that unless anticipated by vigorous action, the last state of that city will be worse than the first; and our cables of February 6, 1903, tell us:

"A Royal Commission has been appointed to inquire into the question of the locomotion and transport needs of London and the desirability of establishing some authority or tribunal to which all schemes of railway and street car line construction should be referred.

"Sir David Barfour is appointed chairman of the commission, which includes among its members Earl Cawdor, Sir John Wolf, Barry and a dozen other prominent men."

#### Choice between Public and Private Control.

The question before us, therefore, is no longer Whether, to render most efficient and economic service the franchises of New York should be under a single ownership and management? Nor is it even Whether they will be so? But it is Whether such ownership shall be that of the city, or of a private coterie of financiers?

In former unsettled times the preservation of order, the maintenance of roads and the collection of taxes might have been farmed out to publicans of one and another class as the best practical way to provide for these functions. Whether this be so or not, all will admit that, with reference to these public services, this method is happily defunct. Upon public transport facilities now depend not merely the comfort and convenience, but the social and business existence of a steadily increasing number of our people. Indeed, a private contractor could more acceptably protect us from fire, or police our city, or even dispense justice in our courts, than a financial syndicate is ever likely to administer the aggregated monopoly into which our city's growth must inevitably consolidate its transport facilities.

Years since Congress learned that our national government must control our interstate railroads or commit to their mercies the general welfare of this country. As the attorney-general has lately told us, the control we have attempted has proved a farce; so that already the real question is not whether railroad, telegraph and express business shall be added to the postal service, which our government now transacts, but rather what are the steps by which, and the rate at which, our general government must assume these functions?

Similarly in city affairs the public interest demands that our liberal provision of schools, parks and museums should be utilized by public transport service; and that each of its many branches should be operated as dictated by public policy, and with the advantage of all economy that may be derived from combination with others. This is impracticable if each factor is to be given an independent stand, or if public interest is to be forced to compromise with private gain.

Personally I believe Metropolitan Street Railway management, with all its shortcomings, to be a more than average creditable example of American business enterprise. As to the Standard Oil combine, I make no question but that its control of all the interests to which reference has been made could and might improve greatly upon present service. Our experience, however, does not indicate that either would acceptably dominate this city. There is no reason to believe that any rival syndicate would do better. We need not fear but that American cities are capable of as intelligent and enterprising control of their own affairs as has been worked out in British ones. If, therefore, correlation of local franchises is both desirable and inevitable, we have here the strongest of reasons why the city itself should promptly exploit every function to operate which requires a special franchise.

In what I have said I must not be understood specially to criticise the business corporations I have mentioned. Their interest is legitimate. The trouble is that our citizens have been too indifferent and—as a natural consequence—our city governments too little alert. Nor is New York a chief among sinners in this respect. On the contrary, I believe she well deserves rank among the more public spirited of American cities; and that, as compared with but a short year ago, both her voters and her officials are public spirited and awake.

But here and to-day the fates have put before us the greatest opportunity in its way that has ever existed—probably the greatest one that ever will exist—to be improved or lost. In their resource, energy and assurance our financiers lead Christendom. It remains to be seen whether our public spirit, civic pride and official energy and integrity, are such as to cope with them. Anxious as may be the outlook, I yet believe it to be hopeful.



## THE RECENT HISTORY OF MUNICIPAL OWNERSHIP IN THE UNITED STATES.

[NOTE—The following paper was prepared in part by the late Charles Waldo Haskins, Dean of the New York University School of Commerce, Accounts and Finance, with contributions by Dr. E. S. Meade, of the University of Pennsylvania, and Mr. Clinton Rogers Woodruff, of Philadelphia. After Professor Haskins' death, Professor Joseph French Johnson, of the New York University, completed the paper and presented it to the Convention.—EDITOR.]

Municipal ownership of public utilities in American cities, except so far as concerns the water supply, has only recently been recognized as a possibility, much less an issue. Its advocacy, indeed, was frowned upon as savoring strongly of socialistic propaganda. The supplying of water has always been considered a proper function of government. Municipalities have also constructed and owned their sewers, and in some seacoast cities the docks are the property of the city. Into the purely industrial field of public activity the sale of light, heat and transportation, the building of model tenements, the ownership of telephones, and the many other industrial functions which European cities have so largely taken over, American municipalities have not, until recent years, attempted to enter.

The reason for the close limitation of the functions of government we are not called upon to discuss. Our present concern is with the evidences of a departure from the traditions of individualism and the development of a considerable body of influential opinion in favor of an extension of the field of city activity. Within the last five years a movement has developed in favor of the ownership of public utilities which promises to accomplish considerable results. It is the purpose of this paper to present some of the leading features of the movement.

### Extent of Municipalization.

At the close of 1902, the situation of municipal ownership was as follows: Out of 1,475 water supply systems reported for cities of 3,000 and over, 766, or 51 per cent., were owned by municipalities, 33 were owned by both city and private company, 661 were owned by private corporations, and 14 were owned jointly. In the larger cities



of more than 30,000 inhabitants, out of 135 plants, 88 were owned by the city. As the municipality decreases in size, the proportion of privately owned plants increases, being largest in towns of between 5,000 and 30,000 inhabitants. The percentage of water plants owned by the public is largest in the North Central States, and smallest in the South Central States.

Public ownership of the water supply is an accomplished fact, so firmly established and so familiar that it is not usual to argue from its existence to the desirability of extending the system to other public utilities. The supplying of water being so closely concerned with the public health ranks in the public mind with the provision and maintenance of sewers, the cleaning of the streets and the inspection of food and milk.

When we turn to lighting and transportation, however, we see that the provision of water is a peculiar and unique fact which finds no parallel in other parts of the field of public service. Out of 981 municipalities which are reported as having gas works, only 20 cities own their gas plants. The five largest of these cities are Philadelphia, Louisville, Richmond (Va.), Duluth and Wheeling, West Virginia. Excluding Louisville, where the city is only part owner of its gas works, only one large city, Philadelphia, is the owner of its gas plant, and in Philadelphia the plant has been leased to a private company until 1927. Municipal ownership has made little progress in the field of gas lighting.

Electric lighting is a more recent development than gas lighting, and it is natural to expect that if the sentiment in favor of public ownership is growing, it would find expression in this field. This we find has been the fact. Out of 1,471 cities of 3,000 reporting systems, 193 were owned outright by municipalities, 85 were owned by both city and private company, and 1,190 were owned by private companies. Few of the large cities, however, own their electric lighting plants. Out of 135 systems in cities of more than 30,000 population, 121 were owned by private companies, 10 were owned by both, and only 4 were owned outright by the cities in which they were located. The largest proportion of publicly owned plants is found in towns of from 3,000 to 5,000 inhabitants, where, out of 579 reported, 111 were owned by the municipality, and in 18 cities plants were owned both by the municipality and a private company.

The largest percentages of publicly owned electric lighting plants were situated in the North Central and South Atlantic States, and a much smaller percentage in the New England and the Middle Atlantic States. It is to be noted, moreover, that Chicago and Detroit are the only cities of the first class owning lighting plants, and that, for most of the larger cities which manufacture electricity, public activity is restricted to the lighting of streets and public buildings, leaving the field of commercial lighting to the private company.

It is when we examine the ownership of street railways, however, the most difficult and costly of these public services to administer, that we see how small is the progress of the municipal ownership movement. Out of 928 companies reported in 1902, only one, in Grand Junction, Colorado, was owned by a municipality.

To summarize the progress made, we find (1) that water works are generally owned by municipalities, and that the proportion is increasing; (2) that a few electric lighting plants in cities and a large number in smaller towns are publicly owned, but that while the number of public plants tends to increase, the proportion to private plants does not increase; (3) that in the supplying of gas and transportation, American cities have done practically nothing, the abandonment of its gas works by Philadelphia, the only large city which had undertaken the conduct of this service, raising grave doubts as to the desirability of a general municipalization of this service.

#### Growth of Public Sentiment.

It is evident that if there is a movement toward municipal ownership, it is as yet confined to the formation of public opinion, a necessary preliminary to any practical results. An investigation of the evidences of public sentiment shows the existence not merely of a widespread interest in the subject of municipal ownership, but of a growing demand, particularly in the West, that radical action should be taken.

Clergymen and collegians, who may usually be depended on to voice conservative opinion, have in recent years been outspoken in favor of municipal ownership of public utilities. The League of American Municipalities and the National Municipal League have also endorsed the movement. More conclusive evidence, not merely of a growing interest in the subject, but of a conviction that a change is desirable, is furnished by the press. An examination of the files of a

number of leading newspapers for two years past shows two tendencies: (1) A universal interest in the subject and a disposition to give an increasing space to its discussion; (2) a growing number of journals which advocate municipal ownership in one form or another. The more conservative journals—even those whose sympathies are on the side of private capital—dignify the movement by an increasing space in their columns.

More significant is the appearance of the issue in politics. Chicago, St. Louis, Detroit, Cleveland, New Orleans, Columbus, Denver, Nashville and San Francisco are important cities which have within the last four years brought the issue forward in political campaigns.

The experience of Detroit should be briefly summarized in this connection because it shows the steps which must probably be taken by any city in acquiring the property of any public service corporation. In March, 1899, the McLeod law was passed by the Michigan legislature, then controlled by Governor Pingree, which authorized the city of Detroit to construct, acquire, maintain and operate street railways and to construct extensions thereof. A commission was authorized to be appointed by the common council of Detroit to acquire and operate street railways. The enabling act denied to the commission any authority to pledge the credit of the city to obtain funds for the purchase or construction of street railways. They were only allowed to pledge the earnings of the system as security for any bonds which they might issue. This prohibition is significant in view of the growing uneasiness in Great Britain over the rapid increase in local indebtedness incurred for similar purposes. The commission was immediately appointed and entered into negotiations with the companies. The commission valued the property of the companies as follows: They first fixed upon \$8,000,000 as the value of the physical property and \$8,478,563.86 as the franchise or earning value of the companies. The companies offered to sell for \$17,500,000 in 4 per cent. bonds. The commission proposed to charge a 3-cent fare with the privilege of increasing the rates in case the receipts from the reduced fare proved insufficient to meet the interest and sinking fund charges. It is to be regretted, for the sake of precise information upon a number of disputed points, that Detroit was prevented from trying the experiment of municipal ownership, by a decision of the state supreme court that the McLeod law was unconstitutional, on the ground that the State

of Michigan was forbidden by the Constitution of 1850 from being a party to any work of public improvement.

The agitation in Chicago dates from the attempt made in 1897 to extend the franchises of the street railway companies for fifty years, without provision for adequate compensation to the city. The attempt was defeated by a determined protest from all over the state, most of the members who voted for the Allen law of 1897, failing of re-election to the next general assembly. Since that time, the mayor and a majority of the council have been opposed to any negotiations with existing companies on the basis of a continuance of existing conditions and, as a natural consequence, the sentiment for municipal ownership has been growing. At the aldermanic election of 1902, the question of municipal ownership of street railways, gas and electric lighting plants was submitted to the referendum, with the following results: Out of 213,859 votes cast, 170,824 favored the municipal ownership of street railways, 161,365 of gas works, and 157,740 of electric lighting plants. All shades of opinion were represented in the vote which is, notwithstanding, significant as an indication of a strong public feeling in favor of a change.

In St. Louis, in 1901, the platforms of both parties advocated municipal ownership with limitations, and the Municipal Ownership League made this its only issue, polling 30,000 votes in addition to the endorsement which the policy received from the old parties. In Columbus, Ohio, in 1901, the mayor was elected on a municipal ownership platform. The issue has been prominent in campaigns in many other places.

In addition to formal endorsements by party platforms and popular votes, a large number of mayors have favored the movement, either by expressions of opinion or by actively endeavoring to municipalize public utilities. Among the number may be mentioned the mayors of the following cities: Chicago, Denver, Cleveland, Columbus, Rochester, Toledo, Knoxville and Lowell. A significant fact in this connection is a resolution passed by the Mayors' Association of Connecticut, in February, 1901, petitioning the legislature to allow any city wishing to purchase its electric lighting plant, to acquire existing plants at the cost of duplication.

## Trend of Legislation.

Municipal ownership has figured with increasing prominence in the legislation of recent years. An examination of the legislation on this subject for the past ten years shows the following tendencies on the subject of municipal ownership:

(1) Increased authorization of municipalities to erect, lease, purchase and operate water works, lighting plants, and in a few cases street railways;

(2) Permission to issue bonds beyond the present authorized limit, or to tax for the special purpose of building or acquiring municipal plants;

(3) An increasing use of the referendum in deciding purchases or granting franchises;

(4) Limitation of the length of franchises and of lighting contracts and permission granted to municipalities to regulate rates.

Within the past ten years (1891-1901) the permission to own, erect and purchase water or lighting plants for cities of varying sizes has been extended to municipalities by twenty-four states. California and Kansas have passed very general laws providing for municipal ownership, and the cities of San Francisco, Fresno and Pasadena have new charters with municipal ownership clauses. Denver has also obtained extended powers. Permission to furnish heat and power is of especial interest in western states.

The distrust of elected representatives and the desire of the people to safeguard their interests by referring questions affecting public utilities to a popular vote is seen in a growing use of the referendum. Many of the enabling acts above mentioned provide for referring the questions involved to a popular vote. Minnesota provides the referendum for the purchase or erection of water or electric light plants in villages, or in case of an exclusive franchise; Illinois, New Jersey and Kansas for the building or purchase of water works; Iowa in case the municipality wishes to sell a plant; Nebraska for any ordinance on demand of 15 per cent. of the voters, and Indiana for any ordinance to purchase a plant on demand of 40 per cent. of the voters. A notable example of the referendum is the recent vote of Chicago, already mentioned.

The limitations of franchise take the form of (a) submission to

popular vote, either required or upon petition of part of the citizens; (b) specifications as to the manner of granting franchises, for example by advertising, by auction or by competitive bids; (c) limitation of the terms of franchises; and (d) control of rates.

A feature of especial interest in the present connection is the provision for ultimate municipal purchase. This provision is found in Florida, where the right to purchase is reserved; in Colorado, after 20 years; in Indianapolis, in the charter of 1899, at the end of the franchise, and in Virginia, where the right of purchase is reserved.

In addition to the case mentioned under the referendum, Tennessee (for cities of 36,000) and South Carolina (by a two-thirds vote) require an expression of popular will before a franchise can be granted, and California, Missouri and Virginia require that franchises should be put up at auction and sold to the corporation promising the highest percentage of gross earnings. The percentage of earnings paid to the municipality must amount at least to 2 per cent. for the first five years in Missouri, and 3 per cent. in California. Wisconsin requires competitive bids.

Franchises have been limited to 20 years in Kansas and 10 years in Minnesota, where exclusive. Massachusetts has legislated for control of street railways and special rates are required to be given to school children. The Indianapolis charter requires that street railway companies shall sell six tickets for 25 cents and universal transfers. Rhode Island provides for 1 per cent. of the gross receipts of street railway companies and all over 8 per cent.; California for 2 per cent. of gross receipts after five years, and New York, Illinois, Kentucky and Missouri provide for regulation of rates in certain specified cases.

In this connection it may be mentioned that in the Philippines the Insular Bureau in proposing a franchise for Manila, limited the term to 25 years, with a tax of  $1\frac{1}{2}$  per cent. on gross earnings, and reserved the right to purchase when the franchise expires.

The drift of public opinion toward municipal ownership is unmistakable. The movement has not as yet accomplished large practical results, but the formation of a public opinion not only tolerant, but favorable, is evident.

#### What does our Experience Show?

What, now, does the recent history of municipal ownership tell us of its success and its probable future? First, it must be admitted that



the few experiments which the larger cities have made in operating the more difficult services of gas and electric lighting are not conclusive one way or the other, as to the practical expediency of municipal ownership. In other words, it has not yet been definitely established that municipal operation of public utilities results in cheaper and better service than is attained under private ownership, nor, on the other hand, do the results achieved point unmistakably to the conclusion that public ownership is less economical than private ownership. The four most conspicuous examples of public ownership which have been used in recent discussions to furnish evidence in support of one or the other conclusion, are the Philadelphia gas works, the electric lighting plants of Chicago and Detroit, and the change from private to public ownership of gas and water plants in Duluth. Of these the first is commonly cited to prove the relative inefficiency of public management, and the three last mentioned are advanced in support of public ownership.

The evidence, however, is by no means conclusive. It is true that Philadelphia is receiving a larger revenue from the lease of her gas works than was ever derived from public ownership; that the quality of gas furnished is superior, while the service is on a much higher plane than that rendered by the municipal employees. It has not been proven, however, that a competent administration backed up by a less conservative community might not have secured, by a reconstruction of the gas plant, and a thorough renovation of the administration, a much larger return than is derived from the United Gas Improvement Company, for the earnings of this company are large and increasing, and they might all, conceivably, have been secured for the community. So far as Philadelphia is concerned, there is no doubt that municipal operation was a failure. In view of the peculiar characteristics of the citizenship of this city, however, it is unsafe to generalize from its experience.

The municipal electric lighting plant in Chicago was examined during 1901 by Haskins & Sells, of New York, and the results of the examination reported to the Reform Club were that during the thirteen years, 1887 to 1900, the City of Chicago paid \$49,423.11 more for electric lighting than if the lights had been rented from the private companies. This discrepancy is so small as to leave the issue between the two systems in doubt, so far as the face of the returns shows any-



thing of the relative efficiency of the two systems. Certainly the result cannot be urged against municipal ownership.

Moreover, Professor John R. Commons, in a critical review of this report, has suggested certain favorable considerations from another point of view, some of which the accountants could not notice, but which should be included in any estimate of the significance of Chicago's experience. These are in brief: (1) That the city paid higher wages for shorter days than the private company; (2) that the great reductions in the rentals paid to the private companies for the lights which they furnish to the city were due to the ability of the city, because of its ownership of a plant, to drive a good bargain with the companies; (3) Professor Commons claims that the depreciation charges of the accountants were too high, and (4) that the loss from taxes on the property which the city has owned is excessive because the private companies have paid taxes on a valuation less than half the true value of the property. As a result of this revision of the accountants' report, Professor Commons reduces the estimated cost per lamp from \$123.81 to \$106.55.

Without expressing an opinion on one side or the other, it is significant that such wide differences exist between the estimates of competent investigators. It is obviously unsafe to draw conclusions from such disputed evidence. The experience of Detroit, Duluth, Wheeling, Grand Rapids and various smaller cities which have reported, seems to show a saving from municipal ownership. The evidence, however, as above remarked, of these few isolated examples, is inconclusive.

#### Probable Future Development.

Moreover, as John Stuart Mill pointed out a half century ago, the question at issue is not between private property, as at present managed, and public ownership—if this were the only alternative, municipal ownership might be generally approved—but between private property as it might be managed, and public ownership. In other words, while the experience of various cities, particularly in Great Britain, may be taken to indicate a balance of advantage in favor of municipal ownership, this is not finally conclusive as to the merits of the question. We should, on the other hand, compare the results of municipal ownership with the results of the present system, freed so far as possible from its abuses.

Before endorsing so radical a departure from established practice

as is involved in public ownership of gas plants and street railways, we should first consider the possibility of improving the service, lowering its charges, and increasing the contributions of private companies to the public treasury. In a strongly individualistic community like the United States, we should expect that the line of development would be as follows: (1) A recognition of abuses; (2) a protest against these abuses and a trial of various methods of remedy, and finally, and only if remedial measures failed, a radical departure from precedent in the abolition of private property within those fields where it had been shown unfit longer to exist.

The evidence thus far presented follows this line of development. There is a general recognition of abuses and a vigorous and widespread demand for a change, which has apparently taken the form of a movement toward municipal ownership. It is however, in the nature of things, altogether probable that this movement will expend itself in accomplishing much needed reforms. This conclusion is supported by other than inferential evidence. The demand for municipal ownership is already resulting in important concessions to public sentiment on the part of private companies, which promise to accomplish the ends desired without resort to drastic measures. In brief, private companies are offering to accept shorter franchises, to improve their service, to reduce their rates, to increase their contributions to the public treasuries, and to take the public into their confidence. They make these concessions, it is true, under practical compulsion, but they are none the less important on that account.

#### **Street Railway Companies Yielding.**

The recent experiences of Chicago furnish an illustration of this development. In this city we have first, a number of intolerable abuses and a disregard of the public interest; second, an increasing volume of protest, taking form in a demand for municipal ownership, and finally the concession of desired reforms by the company. The division of the city by the Chicago river into three sections makes it necessary for thousands of regular patrons of the street railways to change cars before reaching their destination or the business district. Until recently forced by ordinances to grant free transfers from one section of the city to another, the companies have refused to do so, collecting two fares for the transfer. Moreover, the companies whose franchises

were soon to expire have allowed their property to deteriorate, thus further impairing a service already sufficiently bad. The number of cars has been inadequate, and, on the important streets, such as Madison and Clark streets and Cottage Grove avenue, the antiquated cable service is still maintained. The cable service is overtaxed in spite of the fact that long and unwieldy trams are run, and great congestion of traffic is the result. Overhead trolleys are forbidden in the downtown streets, and the companies have refused up to the present time to put in the underground system. The result of this situation is the worst traction service of any large city in the United States.

Out of these inadequate facilities, however, the companies made enormous profits. The report of the Chicago Civic Federation, made 1901 (see MUNICIPAL AFFAIRS, September, 1901), showed that the excess of the value of the property of five companies, over the original cost of construction, was \$64,222,039.25. The stock has been systematically watered, mainly by the issue of new stock to holders at par, and on the inflated securities large dividends have been regularly paid. Dr. Maltbie, after an analysis of this report, finds that if the "water" were to be squeezed out of the stocks of these companies, 30 per cent. would be available for dividends and depreciation.

In the face of these large profits, earned from rendering inferior service, the companies attempted in the Allen law, passed in 1897, to obtain an extension of their existing franchises for 50 years, with a continuance of a 5 per cent. fare, and with a meagre compensation to be paid to the city. Charges were freely made and inferentially verified that money was freely used to pass this measure through the legislature. The scheme was blocked at the outset, however, by the determined refusal of the mayor and a majority of the council to pass the necessary ordinances.

Out of the agitation over these measures, has arisen the demand for municipal ownership, to which reference has already been made. The vote for municipal ownership in 1902 must be understood rather as a demand made upon the companies for better service and more considerate treatment. Chicago has no authority to own and operate its street railways, although a bill is now before the Illinois legislature authorizing the city to extend its powers. The city's debt already exceeds the constitutional limit, and for years it has been difficult to meet current expenses. It is not clear how the city could oust the

present occupants from the streets, and the civil service of Chicago is notoriously inefficient and incapable of attending to its present limited duties. It is difficult to see how the result of the referendum of 1902 could be translated into law.

The basis and meaning of the agitation is seen in the recommendations presented to the city council by the Street Railway Commission; the Committee on Local Transportation in December, 1901, and which may be taken to represent a program, the adoption of which by the corporations would quiet the agitation for municipal ownership: (1) improvement in service; (2) control of the service to be vested in a committee of council, or a new department of the city administration; (3) a five-cent single fare with six tickets for a quarter and a general system of transfers; (4) compensation to the city in the form of a percentage of gross receipts, with a requirement that the companies should pave and sprinkle the part of the streets occupied by their tracks, and should lower the tunnels under the river; (5) annual reports to be made to the council, which shall give full information concerning the affairs of the companies; (6) overcapitalization is forbidden; (7) franchises to be limited to twenty years, the city retaining the right of purchase the tangible property at any time after ten years at its market value, plus five per cent. for a forced sale.

Only within the last few weeks the Chicago Union Traction Company has yielded to the pressure of public opinion and offered to reorganize the system in exchange for a twenty-year franchise containing the provision that the city shall have the right to take over the property at its actual value at the end of this period. The *Street Railway Journal* has recently stated that the Chicago franchise difficulty will be eventually settled along the lines which have been indicated, and which represent the demands of the average citizen. The significance of the agitation of the past five years is seen in this recession of the traction companies from their uncompromising position.

The agitation for municipal ownership in Columbus was also allayed by the granting of concessions by the private company. In January, 1901, the Columbus Railway Company applied for an extension of its franchise for twenty years, offering to sell seven tickets for 25 cents, with larger privileges of transfer, a reduction of approximately 1 cent in the fare. Although the mayor had been elected on a municipal owner-

ship platform, he endorsed the application of the company, which eventually received their franchise. This discussion was enlivened by a remarkable proposition from Tom L. Johnson, apparently made in good faith, which is of interest because it apparently marks the extreme limit of concession under private ownership. In exchange for a twenty-five year franchise, he offered the following: (1) Three-cent fares with universal transfers; (2) limit of profits to owners of 6 per cent. on actual cost; (3) any earnings in excess of 6 per cent. to be applied to retiring the capital and reducing the interest charge; (4) an option to the city to acquire the property at any time by paying the actual cost at that time; (5) reserved right to the city to reduce fares below three cents as fast as earnings would warrant after paying 6 per cent. on the outstanding capital.

#### Conditions in Lighting Industry.

The gas industry, next to the street railways, has furnished illustrations of the evils of excessive charges partially concealed by overcapitalization and of municipal corruption. The last census furnishes conclusive proof of the overcapitalization of gas companies. From 1890 to 1900, capitalization of gas companies in the United States increased from \$258,771,795 to \$567,000,506, or 119.1 per cent., while the cost of materials used increased 47.1 per cent., and the total value of products 32.9 per cent. It is a well-known fact that the cost of producing and distributing gas does not much exceed 50 cents per thousand feet in large eastern cities, and is even lower in some cities of the middle west. The average rate charged, however, is \$1 to \$1.25.

A recent illustration of the enormous profits of the gas industry in large cities is furnished by the Consolidated Gas Company, which now controls all the gas plants in Manhattan and Brooklyn. In 1902, this company, after paying all its fixed charges and 8 per cent. on its stock, laid aside a surplus of \$2,100,000. These huge profits can be matched by the returns from most of the larger cities. The public is gradually awakening to the fact that they are exorbitant and out of all proportion to the money invested or the service rendered. This growing conviction has already taken form in several states in forcible reductions of rates, and lies at the bottom of much of the hostility recently displayed toward municipal monopolies.

The President of the American Gas Lighting Association, at the

1902 meeting, in his annual address, expressed a recognition of the danger to vested interests from public hostility and of the method by which public confidence could be regained, as follows:

"We believe that the governing authorities of municipalities must be brought to a realizing sense of the importance of conserving vested rights, and the surest way to coin public favor is to deserve it. The identity of interest idea must prevail with the public. \* \* \* Privately owned companies, where ability and enterprise are rewarded by added compensation to managers and just profits to owners, and where the merit system is found at its best, will doubtless hold their own for a long time to come against any demand for public ownership, but the best safeguard which we have against the seeming trend of public opinion is our own conduct toward the communities we serve, which should result from the careful study of the interests of the public from the attitude of good citizenship."

Another indication of this change of front on the part of public service corporations is seen in a growing recognition of the right of the public to have precise and accurate information at regular intervals on all essential facts of the operation. The National Gas and the National Electric Lighting Association have recently formulated systems of uniform accounting and are endeavoring to put them into operation.

#### **Demand for Franchise Taxation.**

The demand for municipal ownership is finding still another outlet in the growing agitation for franchise taxation. It has been customary in the United States to tax public service corporations as if they were individuals. This method does not take into account the value of the corporation as a going concern as distinct from the cost of duplicating or the selling value of its plant. Many states have accordingly given up actual value as a basis of assessment, and now levy taxes, assessed by some state officer or board on some other basis, such as gross receipts, mileage, par or market value of shares. Such taxes can be easily administered, but they are necessarily unequal and arbitrary, the result of guess work and intrigue. Dr. Whitten, the Sociology Librarian of New York, in a published discussion of this subject, states that there are but two bases of taxation—net income and actual value. The old method is favored by corporations because the "amount paid is usually much below their share in the burden of government." This fact and the recent decisions of the United States Supreme Court sustaining the unit system in assessments of property and franchises have brought about a general trend to abandon the taxation of mileage, gross receipts, etc., and substitute the taxation of the actual value of property and franchises as deter-



mined by state boards. This tendency is marked in Ohio, Indiana, Illinois, Kentucky and Missouri, with certain special legislation in New York, Pennsylvania and New Jersey.

Two noticeable efforts to increase the taxes of corporations are: (1) The Illinois Supreme Court decision (October 24, 1901), authorizing the Board of Equalization to assess gas, traction and other corporations at fair cash value, thus increasing the returns demanded by the Chicago Teachers' Association; and (2) the work of Tom Johnson's new board which raised the assessment of railway, gas and electric companies \$17,000,000, resulting in a reduction of the tax rate from 3 per cent. to 2.67 per cent.

In conclusion, our discussion seems to have established the existence of the following tendencies in the relations between public service corporations and municipalities:

First, a recognition of abuses, a protest against these abuses, and an attempt to remedy them by a resort to municipal ownership.

Second, a growing tendency on the part of municipalities to curtail the power of corporations by taxation, regulation of rates and limitation of franchises, and

Third, an increasing recognition on the part of the corporation managers that if they are to protect the interests of the stockholders, they must conciliate the people by improving service, reducing rates and increasing their contributions to the public treasury.

There is, apparently, no reason to expect, at least in the immediate future, any marked development in the direction of so-called municipal socialism in the United States. If the private companies should refuse to yield to the pressure of public opinion and maintain the existing conditions without amendment, a radical departure from American precedents might possibly be looked for. In all reasonable probability, however, the owners of public service corporations will recognize the necessity of conciliating public opinion and will thus prevent the necessity of an experiment, whose successful result is not entirely assured.



## EUROPEAN AND AMERICAN METHODS AND RESULTS COMPARED.

BY ROBERT P. PORTER.

While I am preparing this paper a lively discussion is proceeding here in England on municipal trading, and the most talented men on both sides of the question are debating the subject on platforms and in the newspaper press. The *Times*, still as powerful as ever in moulding British public opinion, opened its great debate which has now lasted nearly six months with the following strong manifesto:

"The time has in fact come for the British people to say whether or not they concur in the transfer, not only of great, speculative, and often even experimental industries, but of all sorts of minor trades as well, to municipal control; whether or not it is desirable that our towns and cities should be changed into essentially socialistic communities where trade, industry and local government will all be conducted on socialistic lines; whether or not the incurring of stupendous financial liabilities, the rapid accumulation of local debts, and the increase to an almost unbearable extent of local taxation, are consistent with the best interests not only of the towns and localities concerned, but of the nation at large; and whether, assuming that all these things are right and desirable, the status of our local governing bodies is being maintained at so high a point that one may feel perfect confidence in their efficiency alike for dealing with questions of public health and ordinary local government, for the conduct of so many great and varied industries and enterprises, and for the wise and effective control of a huge municipal indebtedness so that it shall not become a menace to the welfare of the country."

The Society of Arts, which four years ago inaugurated the opposition to municipal trading, held an important meeting recently, with the Lord Chief Justice (Lord Alverstone, formerly Sir Richard Webster) in the chair. In opening the discussion, Lord Alverstone remarked, in substance:

The right of the corporations to spend money on undertakings unquestionably depends on statutory authority; and it is exceedingly important that before fresh statutory powers are given, the subject should be thoroughly understood, and that the nation and those who pressed for municipal trading should know to what they are leading the country. The gravity of the question is really attested by the enormous figures showing the point which local indebtedness has reached and the ever-increasing burden—the burden which had been forced upon them and which is increasing with great rapidity. Reference has been made to the Municipal Corporations Association; only those who have been in that House know the almost unfair weight and

power which municipal corporations have in that assembly. As an old member of the House of Commons, I know that a local member cannot—almost dare not—resist the wishes of a corporation in his constituency, and all the corporations act together. When, therefore, an attempt is made to obtain statutory powers for private enterprise, the influence of other municipalities is brought to bear on other members of the House, through the influence of the Municipal Corporations Association, so that corporations in other places, who have nothing to do with the scheme in question, oppose it because it is thought it may conflict with municipal trade in the particular place.

On the evening of January 21st the London Chamber of Commerce held an important meeting to discuss this question, with Lord Avebury (formerly Sir John Lubbock) in the chair. Upon this occasion Lord Avebury said:

that his objections to municipal trading were not founded in any way on mistrust of, or opposition to, municipal institutions. While admitting to the full the abilities of those belonging to municipal bodies, it did not follow that they had the special knowledge required to conduct manufacturing and business undertakings to a successful issue. Members of municipal bodies, however, could not give that close personal attention to details which was absolutely necessary if business was to be carried on profitably. Another reason was the fact that municipal councillors changed so frequently. The London County Council had been going on only 13 years, but so overwhelming was the work that, of the whole 140 original councillors, only 29 were still members. In conclusion he said that if municipalities persisted in embarking on commercial undertakings they would, he was persuaded, increase the rates, check the progress of scientific discovery and stifle if not destroy that spirit of private enterprise to which in the past English commercial supremacy was mainly due.

A discussion took place the same week at the Junior Constitutional Club, at which Lord Claud Hamilton delivered a strong appeal against municipal trading. Referring to the London County Council, Lord Claud said:

"Another danger arises from the increase in the number of municipal employees. In Birmingham the town council employs over 7,000 men, and if the council takes over the tramway system, the number will be 8,500. The danger to municipal life arises from the voting power of these employees anxious for the promotion of industrial enterprises and supported, as they would be, by trade unions and other socialistic bodies."

Commenting on this speech the next day, the *London Times* said:

"In every municipality there will be a large body of voters and ratepayers whose interest it will be to encourage and promote expenditure; who will be certain to unite, and will be able when united, to carry their point. When once a municipality has set up an establishment for carrying on any industry, it will be of no use trying to undo the mistake, if such it prove to be. Municipal hands cannot be turned adrift. Employment must be found for them at the expense of the ratepayers, and in due course they will agitate for pensions and in the end get them. It will go ill at the next election with any one who suggests that they be discharged because they are useless or that expenses should be cut down. It was stated by Lord Claud Hamilton that the Birmingham Town Council already employed over 7,000 men, and that if the tramways were taken over the number would reach 8,500. The servants and officials of the Glasgow Corporation are put at about 15,000. Well organized, such groups must have great influence in municipal elections; influence sure to be exercised in the long run in favor of granting remuneration in excess of the market rate and of fresh extensions of municipal activity. It is hard enough at present to keep out of municipal politics squalid interests; those, for example, of local tradesmen who wait

orders, or ambitious surveyors, architects and builders who would be glad to see municipal money freely circulating. What would be the power of their sinister influences if every municipality carried on several large businesses and could give orders for many kinds of goods and services? Municipal politics could not fail to savor strongly of money. In some boroughs they would signify nothing else."

These are not imaginary, but real dangers. The establishment of enormous bureaucracies and the creation of a privileged class of employees constitute a menace to the public weal. Reflect for a moment what an organization like Tammany would become if, in addition to the present force of officials, an army of industrial employees should be added. In England the proportion of the electorate who go to the poll seldom amounts to more than 30 per cent., and often much less. Already their influence is being felt, and we read the following in the *London Daily News* in relation to a recent municipal election in Birmingham:

"Even the city council party were not immaculate in their practices. It was not dignified to see leading corporation officials marshalling bands of corporation workmen into the polling area and explicitly instructing them how to vote in favor of the bill."

The town clerk of Birmingham recently said:

"Speaking purely of my own personal opinion, I should like to see all corporation employees disfranchised."

The Lord Provost of Glasgow is in favor of some such change as this, while the disfranchisement of city officials was openly advocated last autumn in a paper read before the British Association at Belfast.

#### Growing Opposition to Municipalization.

However, in spite of the present activity, the campaign against municipal trading in England has not yet assumed much political importance on either side. Members of Parliament are approaching it with the characteristic caution of the British race, and so far the party leaders on both sides have tried to regard it, as General Hancock did the Tariff—a local issue. Mr. Balfour won applause from the attacking party three years ago by granting a Joint Select Committee of the House of Lords and the House of Commons to investigate the subject and report. The committee was composed of capable men, held a number of sessions, heard considerable evidence and interested testimony on both sides. A volume of minutes and evidence was printed with an appendix, and then the whole subject was dropped. There was no report, no conclusions, no recommendations. The abrupt ending of the Select Committee was construed by the opponents

of municipal trading as an evidence of the political strength of the municipal clerks, and unceasing efforts have since been made to revive the Joint Select Committee, or better still, to appoint a Royal Commission with power to take the necessary time and go to the bottom of the whole matter. The Government has not yet recognized the appeal though the demand is rapidly becoming formidable and in the end will be granted.

Whatever selfish interests first promoted the campaign against municipal trading, the movement is rapidly gaining ground and the attitude of the municipal officials throughout England has undergone a decided change. At first all criticism was treated with singular contempt. We were told it was the work of "disappointed company promoters," "a conspiracy of the Electric Combine," and, finally, the "machinations of the agents of American Trusts." The British public is not easily frightened, and with accumulating municipal indebtedness and increasing local taxation the plain every-day ratepayer who has no axe to grind is beginning to ask for an accounting. In response, elaborate tabulated statements and statistical exhibits have been prepared and sent broadcast, some of which are marvels of municipal accounting, and from now on it may fairly be assumed that both municipal trading and municipal socialism in Great Britain have been compelled to assume the defensive. Property owners' and ratepayers' associations are forming all over England, and the United Property Owners' and Ratepayers' Association of Great Britain is assuming national importance. The Industrial Freedom League, an association formed "to free private enterprise from undue interference and from rate-aided competition," is also gaining ground in all parts of the Kingdom and must continue to increase its influence, as the ratepayers realize the gravity of the abuses creeping into the administration of local affairs.\*

#### **An Ambitious Programme.**

I am asked to discuss that boundless field of municipal activity which is prepared to make the British citizen the constant subject of corporation solicitude from the time when in his cradle he is fed on

\*At the end of this paper I append a complete list of the important literature opposing municipal trading which has been printed in England during the last four years by the Government and by various public bodies. This will be useful to the American student and enable him to study the subject in greater detail than it is possible for me to treat the question.

municipal milk to the day when his remains are reduced to ashes in a municipal crematorium. The leading advocates of these expansive, and to the ratepayers' expensive, ideas have made considerable headway in Great Britain during the last twenty-five years, and are now boldly proclaiming that there is no finality to municipal enterprise, no limit to municipal business.\* These industries, be it remembered, must be carried on at the risk of the ratepayers, by representatives not elected because of special experience, but because of party affiliation. Nor is it expected that the men thus called upon to administer these important trusts and successfully conduct these industrial enterprises will give more than part of their time to public affairs. At least you will agree that the programme is an ambitious one and its successful execution both difficult and costly.

Before considering the reasons for continuing this programme in England and for transplanting any part of it to the United States, it may be well briefly to recount what has thus far actually been accomplished. In doing so it will be my endeavor to deal exclusively with facts, and when comment is necessary I will as far as possible quote British authorities. Much of the municipal work thus far done by our kin beyond the sea, when confined to the administration of city affairs and not to trading enterprises, has been excellent and may serve as a useful object lesson. It has all, good and bad alike, met such unqualified praise in the United States, that it requires some courage to present the facts and argue the case on its merits. We are all well aware that the administration of municipal affairs in many of our large cities is far from what it should be, but it is by no means so hopeless as some seem to imagine. The essentials of municipal administration are as a rule well looked after in the United States.† In America we

\* Besides the numerous industries at present being carried on by British municipalities, we find among the powers applied for the manufacture of steam engines, dynamos, gas and electric fittings, and paving materials, cold air storage, ice manufacture, milk supply, concert rooms, shop, saloon and refreshment rooms, hotels, cycle tracks, etc. Tramcar factories have been established, and even a brass foundry to make fittings. Municipal telephones are being undertaken, and a system of universal fire insurance is being discussed. Municipal banks and the issue of municipal bank notes, municipal pawnbroking, municipal bakeries, and even municipal public-houses, have all been seriously suggested. Municipal collieries have been under discussion in the north of England, and the Bradford Corporation has actually proposed to supply coal for retail consumption. To the commonplace duties connected with public health, building regulation, streets, policing, protection from fire, care of parks, we must add all these more intricate businesses.

† From a sanitary point of view they compare favorably with English cities. The water supply is invariably better and the fire department more efficient and up-to-date. In matters of public education, including technical and industrial schools,

find the time and ability of those willing to take part in such work, fully absorbed in performing the regular functions of municipal government. They have not yet entered into trade. When one realizes how strong is the temptation to jobbery under existing conditions, it is perhaps fortunate for the taxpayer that the constitutional debt limit, together with the American dislike for paternal government, has kept our municipalities from venturing far along the dangerous pathway of municipal socialism.

#### State Socialism in America.

At this point the British and American systems diverge. In all that strictly relates to the administration and government, the assessing of property, the levying of taxes, the creation of debt and looking after the general welfare of the inhabitants, it might be interesting and even useful to compare British and American cities of the same size. In all that relates, however, to municipal trading or ownership of profit making undertakings, the experience has been almost exclusively English. Perhaps the phrase (exclusively English) should be modified, for we are not entirely without experience. To recall it, will you pardon me for quoting from an article on the history of our state debts, which I wrote more than twenty years ago.\* The lessons taught by this experience have long since been forgotten, but the legacy of these unhappy experiences, in the shape of the state constitutional limitations of debt, have been of far reaching and lasting benefit. The quotation is as follows:†

we are decidedly ahead, as we are in public libraries. Our parks and squares and breathing places, both in number and beauty, are quite equal to those in British cities and as a rule as well kept up. The streets of some American cities suffer when compared with those of England, but in the matter of lighting—both gas and electric—and in locomotion, it must be admitted we are far ahead of our British cousins. I am one of those who believe that the English have just as much to learn in the administration of these great modern centres of commercial and industrial activity from us as we have from them. While we have spent millions in making new streets, in extending boulevards and in laying out new parks and pleasure grounds to supply the needs of modern communities, the cities of the old world have expended just as much in tearing down their old buildings, widening their narrow thoroughfares, straightening out their crooked streets and here and there clearing a spot in a congested district to give the inhabitants more fresh air and light. It would thus seem that the legitimate work of making these cities more habitable for the constantly increasing populations has taxed alike the resources of the old and new world.

\* *International Review*, vol. IX., 1880.

† "The history of state debts may properly be said to date from the year 1830, when the states of this union owed only about \$13,000,000. During the next seven years the greater part of the debt which caused so much financial embarrassment in 1841-42 was contracted, and the state governments laid the foundation for a series of financial disasters which have since overtaken many of our states, and disgraced



**Rapid Increase of Local Debt.**

It is impossible to watch the present mad rush of British municipalities into all sorts of speculative industries without being reminded of these experiences. Perhaps the most striking fact which the last annual report of the British Local Government Board (1901-2) brings out is the extraordinary rapidity with which the internal debt of the country is increasing. Last year sanction was given to loans amounting in the aggregate to no less than \$144,677,465, and the average amount added in each of the last three years has been only just short of \$125,000,000. Never before has there been any approach to these figures. In 1891 the sum was \$37,021,495, while the average for some years previously had been about twenty-five million dollars annually. If we go further back, we find that in 1874-75 the entire outstanding debt of British local bodies was just short of \$465,000,000, while in 1899-1900 (the latest year for which exact figures are available) the amount was nearly \$1,470,000,000, and at the present time it may be roughly reckoned as \$1,650,000,000. In 1875 the local debt was about \$20 per head of the population. It is now over \$50.

During part of this period, between 1880 and 1890, municipal debt in the United States declined from \$13.64 to \$11.48, and county debts from \$2.47 to \$2.27 per head of the population. The returns for 1902 so far as received by the Census office indicate a slight increase per

us both at home and abroad. The increase in the whole public debt of the states from 1830 to 1840 amounted to \$178,409,084. \* \* \*

"When General Jackson became President there was a general and well-grounded belief that the financial affairs of the country were prosperous, and that the United States was in a condition to go forward with accelerated speed. \* \* \* A vehement desire arose to construct great public works, chiefly such as facilitate and promote internal commerce. \* \* \*

"As before said, our foreign commercial debt had been paid with so much promptness that European capitalists formed a very high opinion of both our resources and our honor, and they took the stocks of the states as freely as if they had been gold and silver, until it reached the enormous proportion given above. Then came the calamity. The Bank of England found itself in a critical position; there was a scarcity of money in England; prices fell, stocks were unsalable, the United States Bank of Pennsylvania stopped payment, and its example was followed by every bank south of Philadelphia. Men's eyes were at last opened; they saw that the country had not recovered from the effect of years of speculation, and that the attempts to return to a false position had but increased their difficulties. A panic followed. All property seemed for a time to have lost its value. Such was the condition of affairs when it became necessary for some of the states, to which I shall more particularly refer, to refuse and others omitted to provide for the interest which had become payable upon their debts. Until this time the word 'repudiation' had not entered into the financial history of the American states. The word originated in the state of Mississippi, and was ushered into existence by Governor McNut, of that state, in January, 1841, in a message suggesting the plan of 'Repudiating the sale of certain of the state bonds on account of fraud and illegality.'"

capita of debt between 1890 and 1902, but a decrease when compared with 1880. It will be noted that local indebtedness in the United States is relatively much less per capita than in England. As the figures for the 137 cities, so far tabulated, in 1902 show a decrease from the per capita figure of 1880, the total debt per head of population in the United States in 1902 will probably fall far short of the English figure of 1875.

While local indebtedness in the United Kingdom has risen from \$464,100,500 in 1875 to \$1,469,320,000 in 1900, and stands at \$1,650,000,000 at the present time—per capita increase from \$20 to \$50—the aggregate per capita debt of the 137 largest American cities has decreased from \$56.62 in 1880 to \$48.05 in 1902. Omitting New York, where the per capita debt has remained about stationary, while the assessed value of property has more than doubled, I find that in the thirty-five principal cities of the United States the net per capita debt has decreased in 22, and increased in 13, the increase in 4 out of the 13 being only slight. In the same period the value of taxable property has more than doubled in many cities, and has in some increased three fold. A similar table compiled for a like number of the principal British cities shows an increased debt per head of population in nearly every case, only one decided decrease being noted, while only three municipalities increase their indebtedness as their ratable value appeared to justify it.

#### **Industries a Burden Upon the Rates.**

From this examination it seems evident that municipal trading in England has greatly increased debt, not only actually, but relatively to the assessed ratable values and per head of population, that the profits from such enterprises are largely mythical and disappear when the stern business test of the dividend warrant is applied to them, that far from reducing rates there is every reason to believe that rates have been enormously increased by reason of this epidemic of municipal trading. On the other hand, municipal debt has either decreased or remained stationary in the United States when compared with population and value of taxable property. This may have been compulsory virtue on the part of our own cities and due to the debt limitations, but such I find to be the facts.

The excuse offered for the enormous increase of local debt in

England is that a considerable part of it has been contracted for productive industries, and these estimates range from 35 to 50 per cent. But the profits from many of these concerns, under municipal management, are very small indeed. The only reliable estimate on these profits may be found in a paper which Sir Henry Fowler read as President of the Royal Statistical Society, and showed that on a borrowed capital of \$416,895,000, with an average annual income of \$44,490,000, upon which only the sum of \$405,835 had been set apart for depreciation, or about  $\frac{1}{8}$  of 1 per cent., there was an average net profit for the five years ended March, 1898, of \$1,851,705, or about  $\frac{1}{2}$  of 1 per cent. on the outstanding debt which the Local Government Board then put at \$359,415,000.

It must be very tiresome for the British ratepayer to hear so much about the "profits" of municipal enterprise, when throughout the kingdom year after year surely and steadily the rates are increasing. In England and Wales in 1875 the average amount of rates raised by local authorities was 3s. 3d. in the £ of valuation, or about \$4 per head of population. The rateable value was then \$578,230,000. In 1900 it was 4s. 11d. in the £ of valuation, or per head of population about \$6.38, while the rateable value had increased to \$878,110,000. The sum total raised from rates was in 1875 \$95,990,000, but in 1900 it had risen to \$203,670,000, being an increase of \$107,675,000, or 112 per cent. But whereas in 1875 the grants from Imperial taxation were only \$8,405,000, in 1900 they amounted to \$61,265,000, being an increase of \$52,860,000, or 628 per cent. Moreover, while the rateable value of the municipal boroughs was in 1875 \$128,565,000, according to the last return in 1897 it had increased to \$256,090,000. A table prepared by a competent actuarial correspondent for the *London Times* shows for 35 of the principal boroughs of England (1) the total loans raised for remunerative works, (2) the municipal rates actually levied per pound of assessable value, (3) increase or decrease in rates per cent. The figures were given for the years 1886-7 and 1900-01, covering a period of active trading. In three cases only out of the thirty-five have the rates been reduced. It is not contended that absolute deductions can be drawn from these figures, but it is claimed in England by the opponents of municipal trading that the onus of establishing a case for commercial enterprise on the part of

municipalities rests with its advocates, and that so far they have failed to do it.

The claims of the municipal trader that the profits from these productive industries have in the past, are at present, or will in the future, reduce rates, are absolutely illusory. Of course, it is enough to give here and there instances of "profits" turned over in aid of rates, but these individual cases have no value in face of the steady rise of local taxes which we have seen has taken place throughout the kingdom. Not long since a well-known advocate of municipal trading published very widely a table of the reductions in rates for 1900-01 which he declared were due directly to the profits of municipal trading. Here is a sample of how it was done: Manchester reduced its rates in 1900-01, so we are told, by 14 cents in the pound through municipal trading. The corporation, says a writer in the *London Times*, wanted a subsidy of \$250,000 in relief of rates from the gas undertaking, and as there was no surplus, the price of gas was raised 3d. per thousand feet in order to yield it. Is this to be put down as an example of how rates are reduced out of the "profits" of municipal enterprise?

#### Depreciation Not Provided For.

Then, again, the important question of depreciation is left out of account by most of the trading municipalities. They provide for the sinking fund on their debt, but renewals and depreciation of plant are largely neglected, so that it is more than probable that by the time the debts are paid off many of the undertakings will have to be "scrapped."

In order to make clear how little provision is made for depreciation beyond the sinking funds, the *Times* has had the following table prepared, showing for the undermentioned municipalities, (1) the total capital expenditure on remunerative works, (2) the average net profit or deficit for the three years to 1900-1, after meeting the service of the debt, and (3) the annual average provision for depreciation during ten years:

CORPORATION.	TOTAL CAPITAL EXPENDITURE ON WORKS.	NET AVERAGE PROFIT OR DEFICIT AFTER MEETING SERVICE OF DEBT.	AVERAGE ANNUAL PROVISION FOR DEPRECIATION DURING TEN YEARS.
	£	£	£
Barrow .....	453,042	+ 8,798	None
Birkenhead .....	1,185,786	+ 17,483	15,218
Birmingham .....	9,315,501	+ 11,243	None
Blackburn .....	2,087,081	+ 3,947	None
Bolton .....	2,263,782	+ 35,680	12,597
Bradford .....	4,965,731	+ 15,332	6,969
Brighton .....	1,158,355	+ 11,763	4,497 in 1899
Bristol .....	332,573	- 627	None
Croydon .....	522,438	+ 6,466	None
Derby .....	739,612	+ 8,171	None
Halifax .....	1,837,469	+ 24,053	None
Huddersfield .....	2,311,554	+ 11,099	4,425
Hull .....	1,118,140	+ 12,860	340
Leeds .....	5,070,623	+ 44,546	None
Leicester .....	2,124,553	+ 40,321	200
Liverpool .....	8,175,918	+ 117,584	None
Manchester .....	*15,290,037	- 108,353	None
Northampton .....	403,440	+ 3,706	None
Nottingham .....	2,530,588	+ 49,790	2,087
Oldham .....	1,986,861	+ 14,869	None
Portsmouth .....	292,390	+ 1,916	None
Rochdale .....	1,183,855	+ 5,276	None
St. Helens .....	701,075	+ 9,150	None
Salford .....	1,415,891	+ 26,041	None
Scarborough (1899-1900) .....	261,887	+ 853	100
Sheffield .....	4,385,109	+ 21,405	9,384
Southampton .....	544,137	+ 3,313	None
Stockport .....	1,098,933	+ 10,054	None
Sunderland .....	344,656	+ 4,174	None
Swansea .....	758,563	- 8,906	None
Wolverhampton .....	490,313	+ 8,782	123
York .....	129,327	+ 995	None

In commenting on the above table the writer says:

"It will be observed that in many cases a provision of one per cent. for depreciation would more than wipe out the profits and leave substantial deficits. The worst of any figures of this kind is that all manner of important facts and financial juggling may be concealed behind them, and one has great difficulty in getting at the truth."

This is what may be called the "depreciation test," and unless a municipality can meet it fairly and squarely as set forth in the above table as well as the "debt" and "taxation" test, it is of little avail to try and figure out the so-called "profits" of municipal trading.

#### Price of Securities Reduced.

In an address to the Glasgow Chamber of Commerce Mr. Arthur Kay referred to the change in the taste of the investor for municipal loans:

\* Including the loan to the Ship Canal, which costs upwards of £200,000 per annum in interest, etc.

"In 1806 Glasgow Irredeemable  $3\frac{1}{2}$  per cents. stood at 139 $\frac{1}{2}$ ; they are now 118. Glasgow 2 $\frac{1}{2}$  per cents. redeemable 1925—40 were 103 $\frac{3}{4}$  in 1896; now they are at 86. How's that for the credulous investor who believes in the 'unlimited security' put forward by the borrowing Corporation of Glasgow?"

Mr. Davies also touches on this phase of the question:

"The London County Council, which has the best, because the least burdened, of all the municipal securities, has just placed a 3 per cent. loan at less than 98 $\frac{1}{2}$ . Another large town recently made an issue of two millions of 3 per cent. stock at the price of 94. The public only subscribed for about 10 per cent. of the amount offered. There are other indications that several corporations have already felt the pinch of impaired credit. Some of the expedients to which they have been driven are at best questionable."

#### Extent of Municipal Trading.

Having ascertained something of the cost of municipal trading and of the meagreness of the profits, it may next be worth while to see just what public utilities are being operated at present by the cities of the United Kingdom and how the service compares with that furnished by private enterprise in the United States. To begin with the gas supply, local authorities own 240 gas undertakings with a capital of about \$157,500,000 and supplying some 1,767,464 customers; companies own 453 plants, representing \$357,500,000, with nearly two million customers. The fact is municipalities have not been so keen on taking over gas plants since the introduction of electric lighting. The water supply is under public control in half the municipal boroughs in the country and in all but nineteen of the county boroughs. In some towns the policy of making profit out of the supply has been adopted; in others the American plan of exceptionally low charge has been adopted. We have nothing to learn or to copy from England in dealing with this branch of public utility. The water supplies of our large cities are as a rule better in quality, greater in quantity and much cheaper to the consumer than in Great Britain. The tramways of the United Kingdom are about equally divided between the local authorities and companies, the former owning seven hundred miles of lines and the latter about six hundred and twenty miles. With a few exceptions these tramways are not comparable either in equipment or service with the twenty thousand or more miles of line developed in the United States by private enterprise. The United Kingdom should have had by this time four or five thousand miles of first-class electric railways, and it would have had this mileage had it not been for the stifling effect of municipal trading. Two cities owned telephone undertakings—or did, for Tunbridge Wells has wisely sold its system to the National Telephone Company. Several million sterling have been invested in a vast





scheme for housing for the working classes, much of which has been productive of harm instead of good. These seem to be the more important assets in the way of undertakings owned and operated by municipalities.

#### Comparisons Sometimes Dangerous.

Comparisons, if not always odious, are generally dangerous, and when one attempts to make them between two countries like Great Britain and the United States there is always the risk of having all your labor wasted in the general conclusion that perhaps after all English methods suit England best and American methods suit America best. The form of municipal government differs widely in the several geographical divisions of our own country, and this difference is even more accentuated when we come to compare the fundamental laws which govern British municipalities with the state laws under which our own cities are administered. At the best, then, we can only hope to make a few carefully selected comparisons under like conditions that would be of the slightest value. The attempt to do this even might prove disastrous, for there has already been so much quarrelling over details of municipal trading that we are beginning to lose sight of the important principles\* involved. In short, it will be almost impossible to take up and compare the relative merits of individual enterprises in English cities with those of American cities. Such, of course, would make my paper, in the first place, unreadable; it would start a discussion on details instead of broad principles, and would not aid the Convention in reaching conclusions that will be helpful to those who are called upon to vote on the question.

#### Municipal Street Railways.

It is further assumed that the American municipal trader has hardly travelled far enough along the road of municipal socialism to seriously discuss the taking over of the liquor traffic, the bakeries, the supply of

\* The object of this Convention, as I understand it, is to discuss as fully and fairly as possible municipal ownership and public franchises. Speaking generally, the methods of dealing with public utilities in England and in the United States differ fundamentally. This divergence is so great that it seems to me the Convention will simply waste its time if it plunges into an analysis of comparison of the budgets of municipal and company street railways, gas and electric plants, either as we may find these enterprises comparable in England and in America, or as we may find it possible to make comparisons between the two countries, until the broad question of the two distinct methods of dealing with such public utilities have been carefully examined and considered.

milk, the pawnbroking business and the issue of municipal bank-notes. Perhaps for the present purposes it may be wise to confine ourselves to the productive industries, the management and control of which lies at the basis of the controversy now so actively waged in England, namely, tramways, gas, electric lighting, telephones and the housing of the working classes. I have purposely omitted the water supply from the above list, because it is so generally regarded in the United States, as a legitimate function of municipal administration, and I have repeatedly suggested to my friends on the London County Council the wisdom of purchasing and managing the water supply of the metropolis before they undertake the hundred and one other things of minor importance which can, with proper regulations, be done so much better by private companies.

As by far the largest municipal development in Great Britain just now is in connection with the tramways, it has been deemed advisable to treat this branch of the subject as fully as possible. The last available Board of Trade report on tramways for the year ended March, 1901, show that there were ninety-nine municipal street railways in the country, with a mileage of 700 miles; the capital expenditure upon these was over \$70,000,000. The companies had 114 undertakings, with a mileage of 616 miles and a capital expenditure of over \$52,500,000. Long before Great Britain is adequately supplied with electrical street railways, the capital account will have increased to five hundred million dollars. Mr. Dixon H. Davies adds:

"But when that is done the enterprise must still progress. The capital account of a commercial concern cannot stand still. The railway capital of this country has increased about tenfold in fifty years. How can a lower factor of growth be taken for these not less important street railways? The authorities, therefore, will have to take their choice; either they must keep their people without modern locomotive appliances, or they must face an addition to the local debt on this account alone of at least four hundred millions during the next fifty years. It may be said there is a third alternative. They may not seek to supply the whole of the tramways which are wanted, but only such of them as private enterprise fails to provide. But this is an alternative which in the long run will not be found open to us. All experience shows that where a government undertakes a part of the service, it sooner or later has to take the whole. The citizen will not go into partnership with the government; nor will the government permit him to compete with it."

#### Legislation Retards Development.

Previous to 1870 only a few tramways had been built, and these had been promoted under the costly and cumbersome method of submitting a "private bill" to Parliament. To obviate unnecessary trouble, waste of time and expense, a bill was passed which enabled

tramway promoters to apply directly to the Board of Trade for what is called a tramway "provisional" order. Such an order is practically a franchise and is provisional only in the sense that it has to be formally confirmed by Parliament before it can be acted upon. This arrangement was embodied in the Tramways Act of 1870, and so far as it simplified and cheapened procedure, the act was fully welcome. In other respects, however, the act was not so well advised, since it established precedents which have hampered electrical enterprise to a degree not fully recognized by those who have not been engaged in the effort of carrying out tramway schemes in England. When the Tramways Act was drafted, the government was in a most zealous reforming mood. The inspiration of this enthusiasm lay in the misdeeds of gas and water monopolies, which had taken a short-sighted advantage of the too liberal powers granted to them in former years. There was a strong demand that the public should be protected from similar abuses of power, and as tramways were in essence a monopoly, Parliament was naturally inclined to include protective measures in the act. This it did in two ways (1) by giving each local authority the right of vetoing any tramways scheme within its district, and (2) by imposing a tenure of only twenty-one years on tramway concessions, and giving each local authority the power of purchasing the undertaking at scrap value (otherwise called "old iron" or "marine store" prices) when the period of tenure was at an end.

It is safe to say that the government had no anticipation of the actual effect which these provisions would have on the future of the tramway industry; and it is equally safe to say that the government of the present day has made but slow effort to improve matters now that the unfortunate incidence of the veto and the conditions of tenure have been felt over and over again. The attempt to regulate the powers of railway companies in the public interest led to restrictions which were excessive, and so defeated its own intention by retarding the development of an important public service. In justice to the government it must nevertheless be admitted that the full strangling influence of the Tramways Act was not felt until many years after 1870; indeed, not until the dawn of electric traction as a commercial possibility. That was about 1890—twenty years after the passing of the act—and close upon the time when numerous tramway orders were expiring. At the same period, moreover, the important movement of

municipal bodies in the direction of trading enterprises had already begun and was making steady strides in popular favor. In the coincidence of these three things—one legislative, one industrial and the third social—one finds the cause of the present condition of electric traction in England.

#### *Progress Hindered by Short Franchises.*

To understand how this trinity of causes co-operated to put back the tramway clock in England for several years, all that is necessary is to consider the position of a tramway undertaking which, in the years from 1890 onwards, was approaching the end of its period of tenure. Confronted with the fate of expropriation in a few years time at the then "market value," with no allowance for good will or compensation for compulsory purchase, anything like fresh capital expenditure on the undertaking was out of the question, and the efforts of the managers were naturally concentrated on reducing expenses and husbanding revenue, so as to meet, as far as possible, the inevitable capital loss through the sale of the undertaking at old-iron prices. The unhappy effect of the limited tenure arrangement was to force tramway undertakings into a premature condition of senile decay. No money (except what was absolutely necessary) was spent on the renewal of rolling stock or permanent way; the cars were even grudging fresh coats of paint and the conductors new uniforms and new sets of brass buttons so dear to the heart of the public. The service of cars was limited as far as possible; extensions were not to be thought of; and, in short, enterprise as it is generally understood was a business absurdity. The last years of a tramway company were, therefore, years of insufficient and inefficient service. The public grumbled. They called upon the tramway companies to electrify their systems—a vain demand when there was no promise of renewal of tenure for even another twenty-one years. As the undertakings would soon fall into the hands of local authorities, it was natural that public opinion should turn to them for reforms which were apparently unreasonably refused by private companies.

#### *Municipalities Slow to Advance.*

This turn of public opinion was not made in vain, and it has placed the development of interurban electric traction in a position

from which it will probably not emerge for a considerable period. One municipality after another took over its local tramway system when the period of tenure was concluded; and one municipality after another decided to adopt electric instead of animal traction. This latter change was not carried out, however, with anything like rapidity. Even the most progressive of municipalities and those most enamored of trading projects (such as Glasgow) dilly-dallied over the problem of conversion for a quite unnecessary period; and in the hands of local authorities the progress of electric traction has been extremely slow. Although their new found sphere of municipal trading was very attractive, they were at that time extremely cautious about embarking public money in speculative enterprises. When the bold few made the plunge the others followed gradually, according to the fashion of municipalities. There was no inclination to run even the most elementary of risks, and hence the local authorities did not altogether redeem the electric traction industry of England from the reproach of backwardness.

As far as interurban electric lines are concerned, the part which the local authorities played for many years was practically *nil*. Each local authority thought only of its own district, as it was naturally inclined to do. Not until the example of other countries was considered, combined with the successful exploitation of some interurban systems by private enterprise in England itself, did the local authorities begin to realize that the conversion of tramways to electric traction did not merely enlarge the carrying capacity of the old systems, but greatly enlarged the area over which the tramway system should, in the public interest, extend. With horse traction the limits of each local authority were roughly the limits of economical working. With electric traction the parish became a mere item in a comprehensive system, which might extend over a whole county.

#### Private Enterprise Sets the Pace.

It remained, therefore, for private enterprise, in the face of discouraging legislative conditions and the opposing trading ambitions of municipalities, to demonstrate to the public the value of those extensive interurban systems which electric traction had rendered possible. The efforts of private capital towards this end were directed through two channels. In the first place, old tramway undertakings (those approaching the end of their tenure) were acquired in the hope or the

promise that the local authorities concerned would defer purchase until the end of a certain period, or grant a lease to the company. In the second place, extensions are promoted as links in a comprehensive system. In both these operations private enterprise was materially assisted by the operation of the Light Railways Act of 1896, a measure about which I shall presently say more, as it introduced a new element of opposition to the extension of interurban systems. It will, therefore, be clearly observed that private enterprise in English street railway undertakings has had more difficulties to contend against than in America. It has practically been kept out of the rich districts by the cities taking over the plants for a song at the end of short leases, while the virgin districts in England which are worth anything are few and far between.

In some cases, and I shall not weary you with the details of these districts, but refer you to a recent article which I contributed to the *American Street Railway Journal*, entitled "Electrical Traction in United Kingdom," private enterprise has been allowed to link up tramways in areas where the local authorities could not agree as to which particular local authorities should manage the enterprise. In such cases, it would be impossible for me to give an American audience an idea of the difficulties—mainly of a diplomatic character which have to be overcome. Each local authority had to be separately considered, its opinions, its prejudices and its ambitions carefully studied. Each of the local authorities, it should be remembered, had the absolute power to veto any of the schemes of the tramways company for the renewal of tenure, and each of them had to be separately persuaded not to use this power. The history of such undertakings in England illustrates the difficulties involved in arranging inter-communication facilities between neighboring systems owned respectively by companies and local authorities. The municipal systems occupy for the most part the areas of densely populated towns; and their owners have naturally a tendency to regard them as self-contained, and, therefore, superior to outlying systems.

#### Municipality vs. Municipality.

From the present state of municipal opinion with regard to private enterprise, it seems utopian to expect the initiative of better things from local authorities themselves. The necessity for free inter-com-



munication between neighboring tramway systems is already a truism among electrical traction companies; but local authorities, not being business organizations, do not treat the questions on the same broad commercial lines. There seems every reason to anticipate that the local authorities will not, save in rare cases, be readily induced to arrange running powers with tramway undertakings touching their borders. The public interest, nevertheless, demands it, and points to the necessity of altering the law in order to achieve it. When two neighboring railway companies do not agree to running powers for which there is clear public necessity, Parliament can enforce mutual working arrangement, and common sense requires Parliament or the Board of Trade should have the same power to force inter-communication where various tramway systems are contiguous.

The parochial spirit of municipalities has been evinced in their dealings with each other, perhaps more strongly than in their relations with companies. Next-door neighbors are not always the best friends; and municipalities are in this respect very human. The natural pride of each of them in their municipal achievements has an obverse in the natural jealousy of the achievements of others. There is no necessity to dwell on this well-known aspect of municipal life, but it *must*, at least, be referred to in order to explain why municipalities have not done much to develop isolated tramway systems into interurban networks. The old familiar difficulties of getting several local authorities to work harmoniously together in a drainage or water scheme are experienced again in connection with tramways. They are, indeed, exaggerated beyond their usual intensity, because questions of profit on municipal outlay are involved in mutual traction and enterprise. In this matter, also, local authorities are conspicuously human.

One of the most striking examples of the failure of municipalities to come readily to a working tramway agreement was afforded by Salford and Manchester. These two towns, numbering about 700,000 souls together, are really a single town; the boundary line is purely artificial, and it is a common saying that you cannot walk two steps in Manchester without treading on Salford. In such a situation it would be the height of folly to have two isolated tramway systems. The corporations are in this case the tramway owners, and they readily enough admitted that free inter-communication was an immediate practical necessity. Time after time, however, they vainly endeavored to arrange the terms of running powers. Manchester's were objected to by Salford as inequitable; Salford's proposals were objected to by Manchester on similar grounds. Committees were formed by each corporation, reports were drawn up, discussed, submitted to the neighboring corporation and rejected. The press took the matter up, and for more than two years the corporations discussed the matter without coming to any settlement. In the end Manchester decided to apply to Parliament for the necessary running powers.

The corporation of Glasgow is experiencing considerable difficulty in making the necessary arrangements for the extension of its municipal system of tramways to the neighboring shipbuilding centre at Clydebank. Leeds and Bradford, which are only eight miles apart, are debarred from inter-communication because they could not agree to adopt the same gauge for their municipal tramways. Leeds chose 4 feet 8 inches and Bradford 4 feet.

In addition to this criticism "by results," there are many objections to be urged on the grounds of inexpediency and of principle to any local authority carrying on trading operations in the areas of neighboring authorities, as must be done if municipalities are to become promoters of comprehensive systems of electric lines. Whether the ratepayers of A should be taxed to provide tramways for B, and whether the penalties paid by the public to B should be applied to relieve the rates of A, such are the questions opened up as soon as a local authority trades beyond its border. And all the arguments against municipal speculation within the limits of each area become emphasized when the area is overstepped. Experience seems to indicate very clearly that in the majority of cases the municipal control of a tramway system implies an obstacle to the development of the system to become part of an extensive interurban system. It will be particularly interesting to me to hear how those of my own countrymen who favor municipal ownership regard this sort of playing at modern locomotion. How, with such restrictions as these and such local interference, we could have established the great interurban street railway systems centering in Boston, Chicago, Detroit, Pittsburgh and Cleveland, to say nothing of New York and a dozen other cities which will at once suggest themselves, I do not know. Could anything but private enterprise have linked up Minneapolis or St. Paul? I think this phase of municipal ownership deserves special attention, for herein it shows one of its greatest weaknesses.

#### Light Railway Act.

The Light Railway Act of 1896, already referred to, has not turned out an unmixed blessing for British tramway enterprise, especially when it was pushing over wide areas and linking up small towns as we do in the United States. It has proved a good friend of electrical traction industry, although it has not realized all the hopes which were entertained upon its first appearance. As no definition of a light railway was given in the act, the simple and rapid procedure provided was largely taken advantage of by tramway promoters in seeking powers

for interurban lines. Its provisions were more favorable to free enterprise than those of the Tramway Act of 1870, but as the old act was not definitely repealed, the Light Railway Commissioners felt obliged to interpret the new act in the spirit of the old. Hence the power of the municipal veto remained active under the Light Railways Act, although the act did not specially grant the power of veto; and the principle of limited tenure remained, although the act contained no definite instructions in that point. The situation was so anomalous and was productive of such frequent disappointment in the case of thoroughly sound schemes that the revision of the Light Railways Act has become almost imperative.\*

The particular clause in the Light Railways Act which gives the railway companies a lever for opposition reads as follows:

"If the Board of Trade, on such consideration, are of opinion that by reason of the magnitude of the proposed undertaking or of the effect thereof on the undertaking of any railway company existing at the time, or for any other special reason relating to the undertaking, the proposals of the promoters ought to be submitted to Parliament, they shall not confirm the order."

"Submitted to Parliament" means that the schemes shall be embodied in a private bill passed through all the expensive process of Parliamentary treatment. The railway opposition is then considered "on its merits" in theory only, since the natural tendency of Parliamentary committees is to protect the vested interests of the railway companies. In actual practice, scheme after scheme has been rejected by the Light Railway Commissioners on the ground of railway opposition. Only in certain cases has the procedure by private bill been either feasible or successful.†

\* At the present moment the government possesses a new Light Railway Act, which will be put before Parliament for consideration "at the earliest opportunity." That may be this year, but more probably it will be next year. As the provisions of this new act are still private, it is impossible to guess how far they will assist the progress of electrical traction. Nevertheless, the president of the Board of Trade has publicly stated that the proposed act contains an acceptable compromise on the crucial question of the absolute veto hitherto possessed by the local authorities. That is at least one step in the right direction, and, as such, is something for which to be grateful. But unless a more radical reform than that is effected by the bill, it may prove ultimately to be a stumbling block by containing just sufficient progressive qualities to give the appearance of improvement, yet not sufficient to make it anything like permanently useful in the cause of progress.

† For a time it seemed as if the attitude of the railway companies was about to prove as serious a stumbling block to the construction of electric traction systems as the obstacles interposed by reactionary municipalities. Fortunately, there are signs of a change in the attitude of the railway companies. From their first natural feeling of uncompromising opposition they are apparently passing to a better comprehension of the true functions of the tramway in relation to the railway.

These facts all tend to show that outside the Metropolis private enterprise desirous of building, equipping, maintaining and operating tramways or street railways has had anything but an easy road to travel. It may be fair and just, therefore, to remember this before we institute any comparisons between the splendid achievements of private enterprise in the United States which has been encouraged by liberal rather than discouraged by illiberal legislation.

#### The Situation in London.

The situation in the Metropolis differs materially from that of the town outside, and the announcement is made to-day (February 7) of the appointment of a Royal Commission to inquire into the means of locomotion and transport in London. The Commission will find the situation complex.\* London, with an area of one-fifth of one per cent. of the United Kingdom, contains 15 per cent. of the population. The county of London, at the last census, had a population of 4,536,524; Greater London had a population of 6,581,077. The administrative county of London, comprising a portion of the ancient counties, Middlesex, Surrey and Kent, has an area of 74,823 acres. Greater London, or the Metropolitan Police District, includes the counties of London and Middlesex, and part of the counties of Surrey, Kent, Essex and Hertfordshire, representing an area of 443,421 acres. In studying the problem of London locomotion these two distinct areas must be kept in mind, as well as a constantly growing area extending in almost every direction from the Metropolis for a distance, say, of thirty miles from the centre, into districts being rapidly settled by people whose occupation or business is in London, and the continued harmonious growth of these parts must in a large measure depend upon the means provided for rapid transit from the city to these outlying districts.

There has been a good deal of old-time private enterprise shown by the railways centering in London in handling passenger traffic quickly and cheaply. Take, for example, the Great Eastern Railway, which handled last year the amazing number of 91,740,654 passengers in their four London stations, Liverpool street, Bishopsgate street, Bethnal Green and Fenchurch street. The North London Railway, on less

\* In a series of articles in *Traction and Transmission* for September, October, November and December, 1902, I have gone more fully into the situation than it is possible to do here.

than twelve miles of line, carried 42,000,000 passengers, about 27,000,000 of whom centered at Broad street. The London and South Eastern, and Chatham and Dover, combined, nearly reach an aggregate of 60,000,000. The London, Brighton and South Coast had nearly 28,000,000 for London Bridge and Victoria. The London and South Western can boast of 30,000,000 passengers to and from Waterloo last year. The Great Northern system, including season tickets, handles 34,000,000 passengers annually. These are prodigious figures when applied to the steam railway, which is fast becoming a clumsy and cumbersome machine in the transportation of urban passengers. That some of these railways have reached the point where they can carry no more passengers on existing tracks, or that the demand of population has become so enormous that these millions can no longer converge and radiate at these points is not surprising, and certainly the railway companies themselves are not to blame.

For the county of London population, something under five millions, Mr. Kinnear has estimated the traffic in 1900 at 1,273,500,000. This gives 400,000,000 for railways, tubular or otherwise; for the omnibuses, 500,000,000; tramways, 300,000,000; hackney carriages and steamboats, 73,500,000. The following, however, is a more recent, and I think more accurate, estimate for 1902:

	Passengers.
Suburban railways.....	618,000,000
Tubular and underground railways.....	264,000,000
Tramways .....	390,000,000
Omnibus .....	530,000,000
Cabs, etc.....	30,000,000
Total passengers carried in 1902.....	1,832,000,000

At the present time, within the one hundred and twenty-one square miles of superficial area comprising the county of London, including the tube railways in operation, there is a total length of line of 228.45 miles and no less than 273 railway stations.

Turning from railways, steam and electric, to tramways, I find that the London County Council and eleven companies have running-powers in the county of London. The total length of lines within the county, according to the latest available official report, is 115 miles;

and the length of line belonging to the companies which extends beyond the county boundary is nearly 32 miles. The London County Council owns 72 miles of line; 48 miles of which, situated on the North side of the Thames, are at present worked by the North Metropolitan Tramways Company, while the 24 miles on the South side of the Thames, purchased January, 1899, is worked by the Council itself.

Thus, without considering for the moment the railways and tramways outside the county of London, we have in round numbers 343 miles of lines over which 700,000,000 or more passengers must annually pass.

#### County Council Tramways.

While there undoubtedly exists in the minds of many a serious question as to the wisdom of the London County Council operating either omnibuses, tramways or tubular railways, the ability and energy that body has devoted during the last ten years to the London locomotion problem deserves nothing but unqualified praise. It has put to work some of the ablest engineers on the subject, has carefully examined every proposed scheme, and in the main the influence of the Council has been exerted in harmonizing and systematizing the spasmodic efforts of private enterprise, which under conditions existing in England naturally sought the locations where traffic was densest and quick returns most easily obtained. In very much of this work, though perhaps not in all, the County Council had fulfilled the functions of a legislature thoroughly imbued with the highest form of municipal enterprise. As to whether the results of its labors in this direction would have been more beneficial to the community had it kept within these functions and not descended into the area of competition as a promoter of profit making enterprises, there naturally exists wide differences of opinion.

The outcome of the various investigations conducted by the County Council has resulted in that body taking up, in a practical way, the tramways of London, and if the present policy is adhered to, in a few years the county of London will be the undisputed owner of all tramways within its border. Not only is it the policy to absorb existing tramways but to operate them, and at the present moment we have the interesting experiment in municipal trading in South London of a tramway system owned and operated by the county authorities, while in North London a larger system, owned also by the county of Lon-



don, has been leased to a private concern—the North Metropolitan Tramways Company—until 1910. Sufficient time has not yet elapsed to show the result of these two experiments, but the fact that the two methods of dealing with the transit question have an opportunity to work out for a period of ten years side by side, will give students of economic questions an opportunity to study the two plans under like conditions. It may be that at the end of the lease the North Metropolitan Tramway Company will have paid the county such a goodly share of the profits that the administrators will be glad to renew the lease for another term of years, and perhaps lease the other tramways also to private companies. On the other hand, the Highways Committee may have shown such ability in the tramway business that the public will favor the operation of all lines within the county of London by the Council.

#### Leasing vs. Operation.

These two systems may be left to work out their own salvation in their respective ways, though I am strongly of opinion that the North London leasing system will in the end give the best returns both in revenue to the city and in reduced fares to the passengers. Speaking roundly, we have here two investments: one (the southern system) represents a capital investment of about \$4,500,000, operated by the Council, on which the net returns last year were about \$45,000; the other (the northern system), leased to a company, represents a capital investment of about \$4,250,000, on which the net return to the Council exceeded \$195,000. It should be stated, however, that the Council has reduced the hours of labor of its employees, somewhat increased the wages and incurred other expenditures which they put forward as an offset for the reduction of profits. The result of the working of these two undertakings may decide the future policy of the County Council. If the county of London can continue to secure the same service and more profits out of the leased lines than out of the operated lines, it will hardly be worth while to conduct an enterprise that requires so much experience and such an infinitude of detail to carry out successfully. Commenting on these two enterprises as far as they have gone, Mr. Dixon Davies, in his excellent paper already referred to, says:

"In London the County Council have leased their tramways on the north side of the river on terms which secure them a rent dependent upon the gross receipts of the undertaking. The tramways on the south side of the river they are working

themselves. Before the County Council made the purchase of the undertakings the South London trams had been exceedingly profitable, and no doubt the Council determined to retain them, with the idea that they would afford a conspicuous example of the success of municipally managed undertakings. From a financial statement made by Sir John McDougal in October, last year, it appears that the profit formerly earned on the south side of the river had dwindled away, with reductions of fares, reductions of hours, increases of wages and other emoluments to the men, to the paltry sum of \$45,000; and even that amount would probably speedily vanish if a proper depreciation allowance were made. On the north side of the river, on the other hand, the rent paid to the Council by the company working the North London tramways was \$384,205. This, after providing for the interest and sinking fund upon the Council's outlay, leaves the handsome net profit of \$197,250, every penny of which is honestly available for the relief of the ratepayer."

#### A Note of Warning.

Meantime the Council is going ahead with the purchase of tramways as fast as the several lines still owned and operated by private companies fall under the Act of 1870. Not only this, but new powers have been sought and obtained from Parliament by the Council for the purpose of connecting its various lines and extending the system. In assembling all these tramways, the County Council is undoubtedly, from the point of view of that body, acting wisely, for, with proper connections, they will certainly be made to pay. The outlay, however, will be considerable before the several railways are properly linked together and equipped, as they must be, with electrical traction. The purchases already made, those in course of negotiation and the improvements authorized, and for which power will be sought next session, amount to a total of nearly \$40,000,000, and in the course of time the Council will own the entire tramway system of London. The Finance Committee, who recently considered these undertakings from a financial point of view, recommended that, as a whole, they might be accepted, and that with the exception of the line from Hammersmith Broadway to Harlsden, "there will be no serious deficit," and to that extent the objection to them on financial grounds is diminished, and some of them seem to promise very satisfactory financial results. At the same time the Committee utters the following note of warning:

"We may point out to the Council that the proposals already approved or now before the Council in regard to the conversion of electric traction of the tramways on the south side of the river, including extensions and smaller undertakings about to be purchased and the necessary generating station, involve an aggregate expenditure of about \$27,500,000. The present tramways debt amounts to \$6,750,000. In addition to this, there will be the expenditure on the proposed generating station at Pimlico, and for the conversion of the northern system and extension on that side of the river. While we are satisfied, on the estimates which have been before us, that the large capital outlay involved in the development of tramways in London will be ultimately remunerative, we think it well to prepare the Council for the possibility that while

these large works are in process of execution the tramways undertaking may occasion a charge upon the rates. A great deal will depend, of course, upon the manner in which the various operations are carried out and the period during which the expenditure remains unproductive. We believe that the Highways Committees are alive to this point, and are shaping their proposals accordingly."

Let us hope the committee are alive to this danger and that the administration of these important undertakings will be wise. It is further to be hoped that the Council's attitude towards private companies ready to invest millions of pounds in other forms of transportation, such as tube railways, will not be that of a competitor scrambling for part of the profits, but that of a public-spirited legislature, anxious to assist the community in obtaining better and cheaper transportation. There is room enough for all in this stupendous field if only good judgment is used in carrying out the several schemes and capable management accorded them after they shall be open to traffic.

#### **An Instance of Wise Management.**

Before concluding the London situation, it seems advisable to say a few words about the North London Tramway system. This system has to do with three counties—Middlesex, London and Hertford. Here we have a total route mileage, as now planned, of about 120 miles, 56 miles of which are being worked. The system will comprise both tramways and light railways, ultimately to be operated by electric traction. The operating lines of this company now carry annually 165,000,000 passengers, a number which will easily be doubled when their entire system is completed and electric equipment substituted for horse power. A county council in England, having certain powers of supervision over a very large area, is able to take a much more comprehensive view of the traction question than a local authority. When, as in the case of Middlesex, the county council is the road authority, it is natural that it should want to retain direct control over the use and maintenance of the roads. At the same time, the county council, like a municipality, is not a body fitted by its constitution to undertake the development of a speculative trading enterprise such as interurban tramway or light railway promotion. Therefore, the Middlesex County Council, in deciding to promote a large system of electric road lines in the county, decided at the same time to leave the working of them, with the associated commercial risks, in the hands of a company. The agreement between the county council and the com-

pany runs as follows. (It may be mentioned that the neighboring county council of Hertford is also a party to the agreement.)

"The cost of constructing these lines, including the necessary road widenings and the acquisition of sites for power stations and depots, is borne by the county councils, who have agreed to grant leases of the system to a company known as the Metropolitan Electric Tramways, Limited, for terms of thirty or forty-two years, respectively, the cost of the machinery, equipment, plant and rolling stock being borne by the lessee company. The conditions of these leases provide that after payment of a moderate rate of interest to the councils and to the company on their respective expenditure, the net profits shall be divided, in the case of Middlesex in the proportion of 45 per cent. to the council and 55 per cent. to the company, and in the case of Hertford in the proportion of 40 per cent. and 60 per cent. to the company. The leases also provide that the company's expenditure is to be limited to material which becomes purchasable by the councils at the expiration of the respective terms at a price which will represent their value as part of a going concern."

Here we have embodied in the contract some of the features of the New York and Boston arrangements with private companies. By this last clause the company avoids the expenditure of a large amount of money on permanent way and improvements, for which a comparatively small return would probably be obtained at the termination of the leases. It will be observed that the tenure of the lease is much longer than the average, which is twenty-one years. This longer tenure, together with the equitable financial arrangements, will enable the company to conduct its operations in a spirit of liberal enterprise, free from the narrow restrictions which are so common in the arrangements with local authorities. To the county council the agreement means complete control of the public roads and a sound security that the public money expended will receive its due interest and thus not prove a burden on the ratepayers.

#### The Gas Industry.

The history of the gas industry in England, of electric lighting, the housing of the working classes and, within a still more recent period, of the telephone is almost precisely the same as the history of street railways. The municipal trader is inclined to quarrel over details, while he is silent about the principle of rate-aided enterprise. He submits columns of statistical exhibits and figures out on paper, huge profits. There is no reason why municipalities, if managed with same economies, should not sell gas cheaper than private companies, but municipal traders have never yet been able to prove that they do. In exhibiting the exhilarating results of municipal trading, numerous comparative tables are prepared for the taxpayers showing the low price of gas and electricity in a city where the municipality owns and

operates the plants and the high price of the same commodities in cities where the plants are owned and operated by wicked companies. As a rule, these comparisons are worthless, for they do not take into account, for example, some little factor like the price of coal, which makes all the difference in the world in the cost of electric light or gas.

Just one example: I note a favorite way in England is to compare cost of municipal with company gas or electric lighting. The results are generally thrilling and always bring down the house. The comparison, however, is none the less unfair because nearly all the company gas and electricity is manufactured in London where the cost of everything is higher; while the municipal gas and electricity is nearly all manufactured in the provinces and the greatest output on and near the coal fields.

Another favorite device may be seen from the following, which I take from the *London Times* of January 16, 1902:

"I marvel that municipal traders should have the audacity to compare Bolton municipal prices for gas and electricity with those charges by private companies at Norwich, where coal is much dearer. As is shown, it only costs .96d. per unit to produce electricity at Bolton, and the municipality has the conscience to charge 3.41d.—a profit of 2.45d. per unit. While at Norwich, where coal is not so cheap, the company has been producing at a cost of 2.4d. and selling at 3.9d.—a profit of only 1.5d. per unit. The comparison is highly creditable to the company."

Bolton is a shining example of municipal trading and, next to Glasgow, is trotted out on the slightest possible provocation, yet it is claimed by those familiar with the facts that its charges for both gas and electric light are excessive, when the fact of its close proximity to the coal fields is taken into consideration. It is easy enough to make profits if you have an absolute monopoly and charge enough for the product.

More than half the gas production of England is in the hands of private companies. The reduction in price of gas made by private companies in England has been as great, if not greater, and as a rule the price charged under exactly similar conditions is less, than by municipalities. In short, in England, as elsewhere, the private companies have set the pace in enterprise, quality and gas and in price. In a recent official inquiry these facts were clearly brought out. It was shown that all enterprise in the gas industry has come from companies because the companies have greater motive for enterprise. The municipalities may follow private enterprise; they never have been known to lead.

## Municipal Electric Lighting Examined.

The advocates of municipal trading claim that in the case of electric lighting "the superiority of public ownership is remarkable." It would take a better quality of electric light than supplied by most of the British municipalities for one to see this superiority—that is, if the comparison is to be made between the company-supplied light of the United States and the municipalized electric lighting of Great Britain. If the quality and cost of electric light is no better than that produced by American methods under private ownership, then I see no advantage in municipal ownership of electric light, for as we shall note, that the "profits" to the ratepayers are difficult to discover.

A committee of the London Chamber of Commerce recently took out the figures from the official returns relating to electric lighting undertakings in England and Wales for the purpose of ascertaining the "net profits," that is, it endeavored to show what the ratepayer received in return for the risk he takes in guaranteeing the undertaking. The report contains the following table:

*Municipal Electric Lighting.*

Total capital, inclusive of borrowed capital, provided by towns.....	\$17,083,555
Amount of capital borrowed.....	15,542,665
Amount of capital borrowed which has been paid off.....	544,240
Balance of capital borrowed which was outstanding at March 31, 1898...	14,952,910
Amount in sinking fund, or loans fund, at March 31, 1898, in respect of capital borrowed.....	508,210
Average annual income for the five years ended March 31, 1898 (or, if the undertaking commenced during that period, from date of commencement) .....	1,522,495
Average annual working expenses from the period mentioned in preceding item.....	843,775
Average annual net profit for the same period.....	686,600
Average annual amount paid during the same period in respect of principal and interest on capital borrowed.....	633,295
Average annual amount set apart for depreciation.....	18,735
Financial result—average annual surplus.....	53,305

It will be observed that the average amount allowed depreciation (\$18,735) is about one-eighth of 1 per cent. per annum, and that the average annual margin of surplus inclusive of this \$18,735 is only equal to one-third of 1 per cent. per annum on the total capital expended. What have our municipal ownership friends to say to this statement of facts? Is there anything "remarkable" in such meagre results? As we have seen, the case of electrical undertakings is somewhat different from gas, because the electric industry has not yet reached conditions so far fixed as to enable it to be conducted on a



strict system of routine without the combination of push and caution which is the essential feature of private trading. Taking the figures of the electrical trade just given, we see that the surplus receipts over the whole of the municipal electric stations of Great Britain amount to an average annual sum of \$53,305. Of this they put the miserable sum of \$18,735, or about one-eighth of 1 per cent., to depreciation account, and the ultimate balance of profit is only equal to one-third of 1 per cent. per annum on the total capital expended. Even this beggarly result would be wiped out if it was not for certain little tricks of accountancy such as charging the law expenses and accountant's fees to other heads in the corporation budget.

It may be well to quote the exact language of the Committee:

"On the face of the summary it appears that, as the result of incurring a debt of \$15,500,000, the ratepayers generally, over the whole of the undertakings, have a surplus of only \$53,300 when they have divided for the payment of interest, etc., on their loan capital. That is to say, the amount distributable in aid of the rates is about one-third of one per cent. only. A cursory inspection of the returns will show that the surpluses are earned in every case in the very big towns, and that the general result among towns of moderate size must have been a deficit met out of the rates, while as for small towns the results are even more unpromising."

This would seem to be a reliable and cautiously worded English opinion on the subject based upon a painstaking collection of facts. Commenting on the report showing the loss on electric supply I find the following in the *Liverpool Courier* of November 4, 1902:

"Still, without going into this vital question of accuracy of accounts at all, sixty towns showed an admitted loss in 1901. Here is the black list: Salford, Eccles, Morcambe, Paisley, Bradford, Bury, Glasgow, Watford, Hanley, Dublin, Whitehaven, Monmouth, Cheltenham, Bath, Stafford, Leyton, Lincoln, Ealing, Shoreditch, Ayr, Dundee, Derby, King's Lynn, Stockport, Southampton, Islington, Tunbridge Wells, Newport, Barking, Birkenhead, Kingston, Redditch, Oldham, Edinburgh, Shrewsbury, Dewsbury, Bristol, Barrow, Blackpool, Gowan, Bedford, Bexhill, West Ham, Ashton-under-Lyne, Wolverhampton, Coventry, Greenock, Leigh, Moreley, Torquay, Gloucester, Plymouth, Portsmouth, Southwark, Hastings, Yarmouth, Leith and Carlisle.

"Amongst them they had borrowed \$30,092,350 on the security of the rates; and the employment of that huge sum for the principal and interest of \$461,400 without making provision for wear and tear or antiquation of machinery. Was it worth while, one cannot help asking, to mortgage the ratepayers' property for such a purpose and for such results? Only look a little more closely into the matter and you will repeat the question more emphatically. For one of the most amazing features is the ridiculously small number of ratepayers who use the light in their houses or shops. In Salford there are 36,000 ratepayers and 401 consumers, and the year's loss was \$37,445, coming on top of heavy losses in previous years. Municipal enterprise in Salford means, therefore, that in one year 36,000 people put their hands in their pockets in order to supply electric light at a loss to a select body of 401. Nearly 99 non-users have to help to pay the electric-light bill of the hundredth, and the year's loss works out at 4s. 2d., or about one dollar, per ratepayer, accepting the accounts as correct, which they are not. And this monstrous anomaly exists not only in Salford, but in scores of other towns. It has been roundly condemned not merely by conservative newspapers and exponents of 'old fashioned' economic theories, but by the *Westminster Gazette* and the *Speaker* and other credited organs of 'Progressiveism.'"

## Power Distribution Checked.

In the matter of electrical energy, we are told by the *Times* enquiry, there is no doubt that countless industries, great or small, throughout the country, would be enormously facilitated if electric power could be "laid on" to them in the same way as gas or water. Many a trade or enterprise now handicapped by cost of motive power would receive by this means a greater impetus than it would derive in any other direction; and the result might be the conferring of a substantial boon not alone on the persons concerned, but on the country at large, and especially so from the point of view of removing industries from urban into suburban districts. Here, again, however, the socialist idea of keeping alike the "public services" and the means of remunerative employment in the hands of the municipalities has prevailed; and while economy would suggest that electric power should be distributed over a wide area from a common centre, the general tendency of local governing bodies has been either jealously to acquire powers and then not use them, or else to want to set up a separate and distinct plant for each particular district. Elsewhere, the enterprise of the private trader has been restrained because he has known that as soon as the local authority heard of his plans they would probably start a scheme of their own, while even if they did not want to do so at once there could be no certainty as to their future policy.

The Lord Chief Justice referred to the danger of the Town Clerks' Association, and some interesting details showing how this Association works against private enterprise were brought to light in the *Liverpool Courier* of November 27, 1902:

"The defender of municipal trading—and it is a sign of healthy reaction that the system is now at last put upon its defense—may be challenged to deny the statement that but for this passing craze for public ownership at any cost the country would before now have been intersticed with a network of light railways and dotted with electric-power stations. Companies anxious to carry out this work have spent thousands in Parliamentary costs and engineering plans, only to be met with a blank veto by municipal councils. For years many towns all over the country prohibited the erection of an electric supply station on the admitted ground that it would compete with the effete and debt-burdened municipal gas works, and the same wall of protection surrounds a considerable number of places to-day. Here are two samples of letters from town clerks to electrical companies, which may be commended to the notice of those who glory in 'municipal enterprise':

(1) 'Yours of the 29th ult. as to the above has been placed before my council, who have directed me to state in reply that as the gas works at \_\_\_\_\_ belong to the council, they will at the proper time take the necessary steps for opposing the proposed issue of a provisional order for supplying electricity for public and private lighting within their district.'

(2) 'May I venture to inquire whether you are seriously contemplating proceeding with the application in respect of which you recently served me with a notice

'and whether you are aware that the corporation are owners of the gas undertakings in this borough? The invention of Mond gas was universally recognized as a valuable aid to the cheapening of production of many industries—universally, with the exception of 'progressive' municipal bodies. Applications to Parliament for authority to supply in this form that cheap power which is a prime necessary of industrial life, have been met with general opposition, fortunately not always unsuccessful, by local corporations. And the ground of their objection is typically expressed in a resolution passed by the Parliamentary Committee of a Midland town that,

'Having regard to the fact that the ratepayers, as the owners of the gas and electric-light undertakings, had at stake a capital of \$2,000,000, that the bill aimed a serious blow at the principle for which municipalities had been striving for so many years past, viz., that the supply of gas, electricity, water and tramways should be under municipal control, the committee unanimously recommend that a petition against the bill should be deposited in the House of Lords and the necessary steps taken for prosecuting the opposition.'

Commenting on these facts, the *Courier* says:

"Here it is openly and unblushingly admitted that in the pursuance of the municipal trading had enormous 'vested interests' have been created, for the support of which the ratepayers have been plunged into heavy liabilities, and for the protection of which it is considered necessary to offer strenuous opposition to the introduction of any more modern systems of supplying light and power. Thousands of pounds of the ratepayers' money are spent in opposing Parliament schemes for giving the industries of the town the benefit of scientific improvements. Is it possible to imagine anything more senseless and more suicidal in a country which depends for its prosperity upon manufacturing progress?"

#### Telephone Service.

The backward condition of the telephone industry of England has been a hindrance to commerce, a source of annoyance to private communication, the subject of investigation by Parliament and a topic of endless discussion and controversy by those interested in both sides of the problem of municipal ownership. The advocates of municipal trading and of state appropriation of public utilities have vociferously maintained that the cause of this lack of enterprise may be traced to the fact that until recently the telephone service was wholly in the hands of a private company. On the other hand, the friends of the company declare with equal force and a strong array of facts that the real cause of the trouble comes from the unreasonable interference and unjust demands of the British government, which have made it impossible for private capital and enterprise to push ahead, apply the latest inventions and increase the service by reduction of price and extension alike of public and private exchanges. A glance at the history of the telephone in England strongly indicates that the government has played a fast and loose game with those who have undertaken to establish it, with the result that its progress has been retarded because the company never knew quite where it stood.

In the first place, the learned electric savant of the post-office declared after it was in full operation, that the telephone was an ingenious toy, but of no value for commercial purposes. This same official is now vociferously denouncing the Marconi wireless telegraphy as of no commercial value, and the Post Office Department is placing an obstacle in the way of its utilization by refusing to build two miles of telegraph wire and establish all-night service at Poldhu. In this way officialdom is doing what it can to retard invention and stifle enterprise.

#### Government Losses on Telegraph.

In the case of the telephone, however, when it was finally established between such large centres of population as Liverpool and Manchester and began to make inroads into the postal telegraph revenues, the Post Office Department became alarmed and interfered. It was decreed subsequently by the courts that the telephone was a telegraph, and that telephones worked for public benefit came under the Telegraph Act, and that therefore the government had a monopoly of them. This was naturally a severe blow to the National Telephone Company and one calculated seriously to impede its enterprise. As the government was not prepared or not sufficiently sure of the financial success of the telephone to take it over bodily, as it had done the telegraph, it licensed the National Telephone Company to work under the Telegraph Act at a 10 per cent. royalty on the gross receipts. The licenses were restricted because they were contingent upon the consent of local authorities who could place obstacles in the way and prevent the laying of wires and otherwise obstruct the system's installation.

For some years the telephone people struggled along, having little faith in the final outcome, until in 1892 the government of the day came to a general arrangement in reference to the telephone business of the country. The British Government took over the trunk wires which connect large towns and placed them under the postmaster general. The business inside towns, which in England is generally called "exchange business," was left in the hands of private companies. This dual arrangement had its disadvantages and, as those who understand the business will realize, its inconveniences. However, the telephone company could do nothing but go ahead along the line mapped out by the government. Having no control over the entire system, being more or less hampered by municipalities in the matter of laying

wires, and being compelled to pay over a large royalty to the government, the inducement was not great to invest additional capital.

The government and the company seem to have got along fairly well, giving an indifferent service for a rather high price, until the municipal traders, looking around for new fields to conquer, took the matter up. The Telegraph Act of 1899 gives the municipalities the right to establish and work local systems within their own area in competition not with the government trunk lines but with the telephone company. Now, as everybody knows, the telephone service is not one which lends itself to competition, because it is obviously inconvenient for a telephone subscriber to find that people with whom he wishes to speak are not on his system, but on the system of some other company. This, with the government absorbing the trunk lines and municipalities reaching out after the local business, has discouraged the company which originally undertook the exploitation of the telephone in England, and some of the officers openly say that rather than still further complicate and obstruct business by municipal trading it would be wiser for the government to take it all over and run it with the telegraph as a state monopoly.

There are several reasons why this plan is just now not agreeable to the British Government. In the first place, public sentiment is murmuring against increasing state undertakings. The Government has made a mess of the telegraph business, which does not even pay. Up to the present year the British Government has lost the enormous sum of \$40,000,000 in the management of the telegraph business. This has become alarming, because the loss is continually increasing, and last year it was \$3,000,000. It is generally conceded that a private company, or two private companies, as we have in the United States, would do the business far better and make it profitable.

#### Municipal Telephones.

The actual experience in municipal telephoning up to date has been so unsatisfactory that perhaps the less said about it the better. In the English case, that of Tunbridge Wells, the system cost so much and worked so badly that the city was glad to sell it to the private company. In the case of Glasgow the accounts are being severely criticised. First with regard to capital expenditure: At the inquiry in 1897 the telephone engineer employed by the corporation estimated that for an

expenditure of \$489,165 he could put 5,200 lines in operation, while according to the published accounts, the total expenditure to May 31 was \$963,465 for a total of 5,067 working lines, which have been erected at a cost of \$190 as against the estimate of \$90. With regard to the revenue, stated officially at \$140,855 for the nine months, in that sum is included the amount paid in advance for telephone services not yet rendered, totalling a sum of \$62,085, and trunk and telegram fees amounting to \$8,290 which were merely collected on behalf of the post office, and required to be at once paid over less a small commission for collection. To sum up, the conclusion is reached that "had the accounts been properly made out, and a reasonable provision charged for depreciation, and a fair rent for the use of the street, and also a proportion of the preliminary expenses which have been charged to capital, say \$12,000 per annum, the result would have been a very serious loss, probably not less than \$35,000 or \$40,000 for the nine months, which there is every indication will grow in amount year by year." In commenting on the above facts, the *Westminster Gazette*, a paper rather friendly than opposed to municipal trading, says, "these statements certainly furnish considerable food for reflection."

#### Municipal House Building.

We now come to municipal house building as it has been carried on in England at the expense of the taxpayer. After examining the facts, it makes one hesitate as to the wisdom of this work, even though to do so may change the opinion of a lifetime. The amount of loans outstanding for working class dwellings according to the latest available official reports is about \$35,000,000. This does not include an enormous scheme proposed in Glasgow involving nearly \$4,000,000. This proposal, however, has been rejected by the Scotch Private Bill Commissioners, who only sanctioned a loan of \$750,000 to complete schemes already authorized. The action of the commissioners has been regarded as an indication that the government authorities believe Glasgow has gone far enough in these schemes. In commenting upon this action Mr. Gibbs says:

"They were evidently impressed by the strong representations to them by owners and occupiers of property in Glasgow, and by the three railway companies which run into the city. It is, moreover, very doubtful whether this municipal house-building has done much to solve the problem which is the ostensible object of the local authorities. The cost of building materials and the rate of wages have increased, and while a corporation cannot get the same amount of work out of its employees that a private



contractor can, the latter cannot, if employed by a municipality, work as cheaply as he can for a company, owing to the restrictions under which his contract has to be carried out."

Mr. Beechcroft, of the London County Council, tells the same story about the housing schemes of that body, viz.:

"that they find that they cannot carry out their building without writing down the value of the land, and further stated that the sites of the dwellings of the Council are valued at \$475,000, but that their actual value is \$1,150,000, the difference being thrown upon the rates. Even then, the rents the Council are obliged to charge to avoid throwing a still heavier burden on the ratepayers are too high for the very people they wish to house, who, moreover, refuse to live under the rules and regulations (no doubt necessarily enforced in the interests of sanitation), and driven from one slum, they crowd into another, and exaggerate the evil. In one locality in London it is stated that only a few of the 5,000 occupants of the houses which were pulled down became tenants in County Council buildings."

Mr. Gibbs further says:

"The same story is told all over the country. In Liverpool, where over \$10,000,000 have been spent on housing schemes, the proportion of the former tenants who occupy the new houses is comparatively small, while at Burton-on-Trent and Stafford housing schemes have been adopted which will involve a charge upon the rates, and the ratepayer who does not live in municipal buildings will have to pay for those who do."

The general effect of municipal house building has been to stop all private enterprise from undertaking workmen's dwellings. The *Times*, in its series of articles on municipal socialism, gives a history of what the housing trusts like the Peabody, Guinness and Rowton and Companies have done for London. On the strictest business lines these companies have been able to secure profits ranging from  $2\frac{1}{2}$  to 4, and in some exceptional cases, 5 per cent. Now, the city is taking up the work at a loss, the public dare not invest in private housing companies, for if they did the municipalities would destroy the possibility of the capital becoming remunerative. Commenting on this investigation the *Times* of October 20, 1902, says:

"Our correspondent shows what, indeed, is common knowledge among all who have given any attention to the matter, that municipal house building is a failure. When all sorts of dodges have been resorted to in order to lighten the apparent cost of providing workmen's dwellings, the fact stares us in the face that the dwellings are beyond the means of the people for which they were ostensibly built, or that municipal regulations are too irksome for that class to put up with. There is a showy, but not very practical, act of Parliament which saddles municipalities with initial costs and delays enough of themselves to destroy the business prospects of a building speculation. Putting these aside, we find that the municipal employer does not get the same value for money as the private one. Overseers and workmen alike think the public purse inexhaustible and a proper subject for plunder. The municipal council consists of gentlemen who depend on the votes of their own servants, and can most easily secure them by laxity in control. The demoralization spreads, the private builder cannot get more work than the public one exacts, and the result is that the rents of workmen's houses steadily rise in spite of eleemosynary aid. Not only so, but in many cases there is an absolute dearth of houses, whereupon a cry is raised, not for a return to common sense, but for more municipal building with a more frank and complete reliance upon the rates. Accordingly, the rates are rising with alarming rapidity in most places, and the rise is contemplated with absolute satisfaction by our Socialist theorists. They think they are making the well-to-do pay

for the poor and the idle. They are really inflicting a loss upon the community, and that loss will fall in the long run heavily upon the poor, in spite of all the legislation in the world. The poor are far more deeply interested than the rich in the wise conservation of the national resources."

If the above has been the result of municipal house building in England, it would be most unfortunate to introduce this method in America. It would be far wiser to encourage philanthropic capital to undertake the work, always under city supervision and co-operation, with the idea that the reward should be a low but sure rate of interest.

#### Conclusion.

As we have seen, most of the advantages of municipal trading have, during the last few years, been exploded. Sound commercial firms in England pay no more for their capital. It has been demonstrated over and over again that a municipality can do the work no cheaper. No one familiar with the facts will contend that a town council constantly changing its membership is a better business board of management than the board of directors of a successful company. There is no proof that the consumer is specially benefited—the service is equally good in the United States under private enterprise, and the cost relative to the cost of labor and of raw material, no more. The assertion that municipal trading affords the only escape from trusts is so well treated by Mr. Davies in his recent paper read before the Society of Arts, that I cannot do better than quote his words:

"It is not the power of capital, but the legal monopoly which is the seat of the evil. In this country (if we perhaps except water) there is no reason why there should ever be any other monopoly than the monopoly of superior efficiency. A tramway down one street can be paralleled by a subway or tube down another street. Gas, which was thought at one time to be above competition, is now an alternative to electricity and petroleum. Hydraulic power has no monopoly. It shares its trade in many places with electric power, and in some also with pneumatic power supply. In private hands the constant activity of invention and the rivalry of commerce may be relied upon to secure in a free-trade country competition in one form or another, but upon the principle pointed out earlier in the paper the healthy stimulus and check of competition is always absent from an industry carried on by a corporation. They have a legal monopoly preserved to them by their own by-laws, and supported by such combinations as the Municipal Corporation Association, by means of which the united political power of the local bodies all over the country is focused and exploited so as to secure for them a degree of protection which is absolute. So far, therefore, from municipal enterprise being a check on the evils of trusts, it will, upon examination, be found to expose the consumer to all the oppressive conditions of the American combine."

The question of better control is also effectively treated by Mr. Davies, who says:

"A gas company or a tramway company sees expropriation looming through the fog of local controversy. Its conductors do not see why the authorities choose their own time for the purchase, and therefore they themselves aggravate the situation

in order to hasten the decision of the authority to buy out the company at the precise moment when it will suit them, in view of the depreciated state of its undertaking and of the capital difficulties ahead, to part with the concern. If the policy of acquisition were definitely abandoned the authorities would be able to enforce a much more effective system of control."

There is little doubt that our own large cities are tightening their control over such industries, and I expect the gentlemen managing the great street railway and gas and electric lighting enterprises will inform you that they are properly kept under control. The reason for this is undoubtedly the fact that the "policy of acquisition" has not yet been adopted by the American municipal authorities. Because of this, private capital and enterprise have made the most of their opportunities in exploiting these industries, and the public is reaping the benefit without being held responsible for the financial success of the undertaking.

It has been my endeavor to discuss the subject assigned me on its business merits, and the conclusion seems to be that municipal trading does not pay. There is, however, another view of the subject that has been very strongly brought out by the *London Times*, namely, that "municipal enterprise" and "progressive municipalism" are really being made the stepping stones to the collective state. Towards this end, it is claimed, the British socialist is working with all the force at his command. Their allies and friends are the well meaning people who, having no policy of their own, follow on the lead of those who are working a well planned scheme and have decidedly definite aims. "The facile Liberal and Conservative politicians," said the *London Times*, in the editorial which introduced its trenchant series of papers on municipal socialism, "who want to warm the hearts of the people by application of the rates are the hope of the socialist bodies." Whether these people who are now so easily led by the socialists will be able to stop when mischief is being done may well be, as the *Times* says, a matter of conjecture. Once create large municipal staffs; once bring together large bodies of men accustomed to light work, regular employment and good wages; put down plant, erect buildings and purchase land; create vested interests with subtle ramifications, and it will not be possible without using heroic means to rectify a series of mistakes. Then, too, there is the question of the capacity of our public bodies to deal effectively and wisely with all the functions thrust upon them. And, gravest uncertainty of all, there is the question whether the purity, such as it is, of municipal government will be maintained if

it exercises a multitude of duties, touches finance at many points and makes politics and business almost synonymous.\*

\* This paper as a whole is not intended so much to convey my opinions on the subject, which I realize are of small moment, but what a very considerable body of thoughtful and intelligent men in England are thinking after a quarter century of experience of municipal trading. For the benefit of those who wish to pursue the subject still further, I append the following list of publications, to nearly all of which I have been more or less indebted in the preparation of this paper:

- Municipal Trading—Report from the Joint Select Committee of the House of Lords and the House of Commons, together with the Proceedings of the Committee, Minutes of Evidence and Appendix.* 1900. Price 4s. 3d.
- Index and Digest of Evidence* to the above. Price 8½d.
- The Cost of Municipal Trading*, by Dixon H. Davies. A paper read before the Society of Arts, with the discussion thereon, February 1, 1899. Price 2s.
- Municipal Trading, II.*, by Dixon H. Davies. A paper read before the Society of Arts, January 28, 1903.
- The Limitations of Municipal Trading*, by Emile Garcke, M. I. E. E. A paper read before the National Liberal Club Political and Economic Circle, October 24, 1900. Price 6d.
- Municipal Finance and Municipal Enterprise.* The Annual Address of the Right Hon. Sir. H. H. Fowler, G. C. S. I., M. P., President of the Royal Statistical Society, May 15, 1900. Price 1s.
- Municipal Trading in England and in the United States.* An address by the Hon. Robert P. Porter to the Municipal Trading Committee of the London Chamber of Commerce, October 31, 1901.
- Municipal Trading.* A paper read by the Hon. Vicary Gibbs, M. P., at the Westminster Palace Hotel, November 19, 1902. Price 6d.
- Municipal Trading.* Paper read before the Birmingham and District Property Owners' Association by Mr. S. T. Talbot, July 18, 1902.
- Notes on the Housing Question in Birmingham, including The Case against Municipal House Building.* Price 1d.
- Industrial Redistribution: The Crux of the Overcrowding Question.* Paper read before the Society of Arts by W. L. Madgen, M. I. E. E., February 12, 1902. Price 6d.
- Municipal Trading.* An address delivered by James K. Shaw, K. C., L. L. D., County Court Judge of Kerry, before the Statistical and Social Inquiry Society of Ireland, Session 1901-2. Price 3d.
- Municipal Socialism.* Reprinted from *The Liberty Annual*. Price 1d.
- Modern Municipalization.* An address to the Paddington Ratepayers' Defense Association by the Earl of Wemyss. Price 1d.
- Dangers of Municipal Trading.* Speeches by the Earl of Wemyss, the Attorney-General (Sir Richard Webster, now Lord Alverstone, Lord Chief Justice of England), etc. Price 3d.
- Fairplay versus Monopoly.* Reasons for the supply of cheap Electrical Power by private enterprise. Price 1d.
- Municipal Socialism.* Series of articles reprinted from *The Times*. Published at the Times office, Printing House Square, E. C. Price 6d.
- Municipal Trading.* An address delivered by the Hon. Robert P. Porter before the British Association, Belfast, September 12, 1902. Published by the Industrial Freedom League, 53 Parliament St., London, S. W. Price 2d.

## RECENT ATTACKS ON MUNICIPAL OWNERSHIP IN GREAT BRITAIN.

BY ROBERT DONALD.

The rapid extension of municipal ownership in Great Britain during recent years has raised fears among one section of the public who see dangers in increasing public control and has provoked the envy of company interests which feel that the scope for their undertakings is seriously curtailed. At a time when the stress of foreign competition is severely felt in many branches of industry it is not surprising that people, seeking excuses for commercial apathy, should see one in the bogey of "Municipal Socialism." Railway companies, convicted of administrative capacity leading to declining dividends, eagerly welcome the anti-municipal attack. Had not municipalities increased taxes and established electric tramways—both to the detriment of railways? Electric power and tramway companies, seeing their field of exploitation narrowed by municipal ownership, were also eager and interested backers. Traders in turn were warned that the encroachments of municipalities meant the end of all private profit, and so by misrepresenting existing conditions and imagining dangers which do not threaten, quite a formidable looking case can be made out against what is termed "municipal trading" or "municipal socialism," but would be more correctly described as municipal ownership.

The municipal, or collective ownership of services of public utility, such as gas, electricity, street railways, is not "socialism." It has none of the characteristics of socialism. Except in the case of water supply, which is municipalized as a measure of sanitary necessity, and which is paid for, for domestic purposes, according to the needs of the consumers, not according to their means, all municipal supplies are paid for according to the means of the consumer. Municipal ownership is more correctly described as a corporative undertaking, in which

all the citizens are shareholders and directly or indirectly participate in the benefits. In dealing with a great movement which tends to place the supply of public utilities and the control of common services in the hands of local governing authorities, one should not approach it from a sectional standpoint. The interests of the whole community must always be the chief, if not always the only, consideration.

#### Local Indebtedness Analyzed.

Two statements, frequently met with in discussions on municipal ownership, are intended to cause some alarm among those who take a superficial view. These are the rapid increase of local indebtedness and the steady rise in recent years of local taxation. "Municipal trading," as it is called, is held responsible for both. A misleading comparison is made between the national debt and local debts. Between 1875 and 1900 the national debt decreased £139,966,974, and in the same period the local indebtedness of England increased £201,000,000. This little comparison has been a fruitful cause of misconception. The national debt represents chiefly the cost of wars. Loans are still outstanding for the American War, for the Crimean War and for other wars for which there is absolutely nothing to show. There are few assets to set against the national debt. The assets of municipalities, on the other hand, outweigh their liabilities. The local debt is being paid back within an average period of thirty years, so that it disappears as fast as it is created, as we are just now passing through a period of exceptional activity in local government. Within recent years the whole system of local government in rural districts and in smaller towns has been reformed. Heavy expenditure has been incurred for hospitals, technical schools, roads and bridges, asylums and sanitary purposes. The cost of board schools and poor law institutions has greatly increased, and just at this period, when the health and educational departments of public services demand most support, municipal authorities have been active in promoting electricity and tramway undertakings. Over 35 per cent. of outstanding loans are borrowed for undertakings which are of a productive character and are therefore profitable investments for the community. An increase of debt represented by such assets as water, gas, tramways and electricity undertakings need cause no alarm, and the financial security of municipalities is good, although in consequence of the South African



War they have had to pay increased interest in recent years and have not always received all the money they asked, but in this respect English industrial concerns have found themselves in the same position.

#### Taxation Decreased by Municipal Industries.

The developments which have taken place in the functions of local governments, in the advance of sanitation, the progress of education, and the reform in poor law administration are chiefly responsible for the rise in local taxation. At any rate, the extension of municipal ownership is not the cause. On the contrary, the public management of municipal services has been the means of frequently relieving the local rates. Profit-making at the expense of a section for the benefit of all is not the sole aim of municipalization; it is only part of a policy which present conditions justify if they do not render expedient. That municipal control is efficient from the ordinary commercial standpoint is shown by the following table, giving the extent to which rates were relieved last year in a number of towns from municipal undertakings, after all charges, interest and sinking fund payments had been met:

TOWN.	AMOUNT OF RELIEF IN THE £.		TOWN.	AMOUNT OF RELIEF IN THE £.	
	s.	d.		s.	d.
Barrow .....	0	10	Liverpool .....	0	8
Bath .....	0	10	Macclesfield .....	1	2½
Blackpool .....	0	9	Nottingham .....	1	2
Bradford .....	0	4½	Oldham .....	0	9
Burnley .....	0	6¼	Preston .....	0	9
Darlington .....	1	8¾	Rochdale .....	0	9¾
Derby .....	0	9	Stafford .....	1	3¾
Dewsbury .....	0	7	Stockport .....	0	8¾
Hull .....	1	3½	Stockton .....	0	6
Lancaster .....	0	11	Warrington .....	0	7
Leicester .....	0	11	Wigan .....	1	7¾

These figures do not convey very much in themselves, except to the ratepayers in the towns who enjoy the relief.

Our large cities having municipalized services need not fear to challenge comparisons with companies. The Manchester City Council, for instance, last year had surplus profits amounting to £85,000. During the last five years the surplus profits from its markets, gas, electricity and tramway undertakings used in aid of local taxation amounted to £442,120. In the same period it lowered the charges for water. These surplus profits remain after interest on capital has

been paid and payments set aside for a redemption fund. The surplus profits from gas, markets, electric lighting and water undertakings of Bolton during the last five years were £200,465, and Bolton, which is one of the cities which has carried municipalization farthest, having municipal water, gas, electricity works, street railways, slaughter houses, cold stores and ice manufactories, has correspondingly a lower rate in local taxation, although it supports six free libraries, two museums, an art gallery, a technical and engineering school, baths, including Turkish baths, hospitals, etc. The population is about 100,000.

Another illustration of the profitable character of municipal ownership in a smaller town is found in the case of Darlington, an industrial town in the county of Durham, with only a population of 44,000. It manages to distribute surplus profits every year equal to 30s. per family, or 5 per cent. on the whole of its outstanding debt. Last year, for instance, the following surpluses were given in aid of rates: From water, £6,137; from gas, £6,967, and from markets, £440. It is just beginning to earn a profit on its electricity supply and has recently municipalized the tramways, and will soon earn large profits from these. Were Darlington served by companies, consumers would certainly have to pay more for their supplies, and would not get relief from rates.

#### Other Criticisms Answered.

The elusive critic, when faced with the fact that profits result from municipal trading, begins generally by asserting that the accounts are not correct and speaks recklessly about "financial juggling." The accounts of municipalities are published, all information can be obtained by any citizen, the accounts are audited by two elective auditors in every city, by an auditor appointed by the mayor, and in all large towns and cities they are again audited by professional accountants. In the case of county councils and district councils, accounts are subject to audit by the Local Government Board. The members and officials of municipalities have no object in misrepresenting the financial results of the undertakings, and when we remember that behind all the checks and audits mentioned, there is the force of public opinion, it is absurd to insinuate that the accounts are "crooked."

Then the critic generally takes another position. He says that municipalities have no business to make any profit at all. It is very

immoral of them to do so. Most of the critics who have recently advanced such opinions are animated, not by a desire to see the price of public utilities reduced to the consumer, but by the hope that the adoption of this system may occasionally lead to balances on the wrong side and thereby help to discredit municipal ownership. As a matter of fact, the policy of establishing municipal undertakings for the social benefits which they bring is preferable to that of carrying them on for the pecuniary relief afforded to local taxpayers.

#### Source of Attacks.

The recent attacks on municipal ownership in England have been led or stimulated by people who are directly interested in large combines. Societies have been started for propagandist purposes by these companies, and they are ever ready to subsidize local ratepayers' associations, to run candidates for municipal elections and carry on agitations in the local press. For instance, an organization called the Industrial Freedom League was recently started by the directors of a large electric combine. They frankly acknowledge that they started this organization to protect their own and kindred interests. They are receiving a certain amount of support from others who have a genuine fear of the spread of municipal ownership. Among the members of the council of this organization is the Hon. Robert P. Porter, who has been one of the speakers on behalf of the League. Mr. Porter's reputation as an impartial critic of municipal matters was very seriously impaired by his intervention in a heated local campaign in Birmingham, where he went to speak in support of an electric combine which was trying to force the municipality to hand over its franchise in street railways. The civic spirit of Birmingham asserted itself on that occasion, and the company, notwithstanding its vigorous campaign to convert public opinion to its side, was ignominiously defeated.

Another system adopted by the Industrial Freedom League to attack municipal ownership has been by means of articles presented to provincial journals, and letters inserted in the local press, which have been paid for at so much per line. The activity of companies advocating their interests in these and other ways might lead to far greater dangers to public life than can possibly accompany municipal ownership. Fortunately, in English cities company interests have been kept well under control. The opportunities for temptation have been nar-

row, the way has been easy for honest government. Leading business men in each community have come forward to serve on city councils. They have been ready to sacrifice their time and their ability without any ulterior motive whatever. The officials are selected and promoted according to merit. They are a permanent civil service. They are not over-well paid, but as a class their honesty and integrity are unquestioned. It is this absence of motive on the part of city councilors, and the integrity of the officials, which makes it easy for municipalities in England to develop successfully municipal ownership.

Several years ago a Parliamentary investigation was begun into municipal trading, and it is probable that the inquiry will be resumed. The commissioners found themselves in difficulty in drawing up any recommendations. They could not deprive the towns of their gas, electric, tramway and other undertakings already established; they could not suggest that other towns should be prevented from establishing the same undertakings, nor could they draw up any hard and fast rule as to the limit of municipal ownership. Many recent developments have been forced on municipalities by the Government, such as the housing of the working classes, the establishment of municipal telephones—which few municipalities sought—and although it is only optional for them to establish services, the opportunity for doing so was given them by the Government. Only last session an act was passed allowing municipalities to erect crematoria. It is therefore impossible for the legislature to place any finality on municipality development. While the Commission may not lead to any practical result the supporters of municipal ownership welcome investigation. They believe that the more closely the results of municipal ownership are inquired into and judged, not only from a commercial standpoint, but from the wider point of view of general utility, the advantages to the community will be more and more apparent.

#### **Municipalization a Success.**

The result of the municipalization of the gas and water undertakings has unquestionably been lower charges. The same is shown in the case of electric light. The average price charged, for instance, is more than 1d. per unit, or thousand watts, lower by municipalities than by companies. The benefits of the municipalization of the street railways—the latest development in municipal ownership—are now recog-

nized. But public authorities have not done all their duty by showing that they can manage undertakings profitably and cheaply. Their chief aim should be to raise the standard of comfort, to improve the social and moral condition of the people they govern. Municipalities, for instance, must be model employers. They need not seek to surpass the best standard, but they should not fall below it.

One of the dangers seen in municipal progress is said to be in the large increase of employees it involves. These employees, however, have various interests and are never likely to act as a unit. Their influence in local elections is not yet great, as they do not all live within the town in which they work. Should they become extravagant in their demands, or otherwise try to exploit the governing authority, there would be a reaction from which they would be the first to suffer.

There are other aspects of a forward municipal policy. There is the splendid stimulus which it gives to good citizenship. We see that in the rejoicings that take place in the opening of municipal street railways. The people feel that the cars are their cars, that it is the duty of the community to support their communal service. There is the feeling of corporate responsibility for the welfare of all classes. This spirit, which calls for self-sacrifice on the part of those who serve the public, leads to greater progress in the sanitary and intellectual needs of the people. There is in every city, as the results of municipal work, a social and moral balance sheet which cannot be represented in figures, but the effect of which is enjoyed by all in the lives saved from disease, in a higher standard of living, and in an amelioration of the social conditions of the whole community.

#### Origin of the Tramway Act of 1870.

Although an Englishman, Outram, laid down the first plate or street railway, and, as is commonly supposed, gave the latter part of his name to the first part of "tramway," no attempt was made to introduce street railways into England until George Francis Train tried his experiments in Birkenhead and London. Street railways had existed in America many years before this time. English business men took no interest in tramways. Tramways were looked upon as a means of obstructing traffic, not of relieving it, and it was not until 1869 that any serious attempt was made by companies to promote tramway schemes. A few acts, giving

powers to run tramways, were obtained before Parliament passed the general Tramways Act of 1870, which was introduced on the initiative of the Government with the intention of facilitating the construction and regulation. It is well to recall the conditions under which this act was passed and the practice which it established, as it is now frequently stated that the development of street railways in Great Britain was delayed and discouraged by municipal action and that the Tramways Act of 1870 penalized private enterprise.

The Metropolitan Board of Works, the central municipal authority of London, which preceded the County Council and was an indirectly elected and thoroughly conservative body, gave the following summary of tramway development in its last report—for the year 1888:

"The first applications to Parliament for power to lay down tramways were made in the year 1869. Seven or eight years earlier experimental tramways had been laid down, with the sanction of the road authorities, in Bayswater Road and in the Westminster and Kennington roads, by Mr. G. F. Train, a citizen of the United States, but these tramways were found to be inconvenient to the general traffic and had to be removed. In 1869 several schemes were brought forward for tramways in different parts of London, and it was necessary for the Board to consider the important question whether and to what extent it was right to concede to trading companies powers over the public thoroughfares. The Board came to the conclusion that as tramways would facilitate locomotion and would therefore be a great convenience to large numbers of people, they should not be needlessly impeded, but rather that all proper facilities should be granted for their introduction into London. It was thought, however, that it would be well, before sanctioning any large scheme, to try the system fairly in two or three of the main thoroughfares and thus gain experience as to its advantages and disadvantages, and the best means of obviating any difficulties which might arise. The Board appeared before the select committee of the House of Commons, to which the bills were referred; and the committee, after hearing evidence on both sides, virtually adopted the Board's views. Three acts of Parliament were accordingly passed, each sanctioning the laying of a tramway. In the following year, 1870, five more bills were introduced, three of them by the companies which had obtained powers in the previous year; and the Board of Trade, perceiving that the formation of tramways in London and other large towns was about to become general and popular, resolved to prepare and lay before Parliament a general bill to facilitate the construction and regulate the working of tramways in Great Britain.

"The main object of the measure, which after due inquiry became law, was to provide a simple, inexpensive and uniform mode of proceeding in obtaining authority for the construction of tramways, to give the local authorities the power of regulation and control, and to avoid the necessity of a Parliamentary investigation in each case."

This Act of 1870 empowered any municipality to obtain provisional orders and lay down tramways. A negative provision about municipal operation was two years later turned into a positive prohibition by a standing order of the House of Commons; not, however, before one or two towns had obtained private acts enabling them to operate as well as own tramways.



It should be noticed that the main object of the Tramways Act and of subsequent parliamentary proceedings was to lay down the fundamental principle that municipalities should maintain control over the public streets, that there should be no trafficking in franchises, no creation of good-will in street railways. After a few years' working of the act—in 1879—a committee of the House of Lords inquired into the subject in order to see what new regulations should be imposed. This committee was strongly of opinion that "it is most desirable that tramways, especially in towns, should be constructed and maintained, though not worked, by the local authorities." This principle was never questioned until a deputation of tramway company directors waited on Prof. Bryce, when President of the Board of Trade in 1894, asking him to maintain the embargo against municipal working and to give the tramway companies, when the twenty-one years' limit was up, a claim to lease them. Mr. Bryce would not depart from the principle laid down in the act. He said:

"It would be argued strongly that the municipalities existed for the sake of the public; and if they worked the lines they would do so to give the greatest public benefit, and that the Board of Trade would be injuring the public if it endeavored to vary the bargain already made against the municipalities in the interests of the shareholders."

#### Operations Under the Act.

The Act of 1870 contains regulations about the width between rails, maintenance of roads and other matters. The crucial clause, so far as companies are concerned, is that, provided a municipality does not itself construct the lines, any company, on obtaining consent of the local authority or the consent of two-thirds of the governing authorities should the lines cover more than one governmental area, is obliged to sell the undertaking at the end of twenty-one years on the municipality paying the value of the plant, material and works, exclusive of any allowance for past or future profits or any compensation for compulsory sale. The companies were perfectly aware of these conditions when they obtained the privileges, and, as a matter of fact, for the first few years they began underwriting their works and set aside a fund to redeem the difference in the capital expenditure between what the works cost and what the municipalities would pay. They afterward discontinued this system, in the hope, probably, of getting the law altered.

A few municipalities constructed their own tramways. These were Glasgow, Birmingham, Bristol, Manchester, Salford and one or two other towns. There was no great desire shown by companies to introduce tramways. This lack of enterprise was due to the natural conservatism of business men or else because they were interested in other matters (at that time British manufactures had reached their highest stage of prosperity). The omnibus, it was thought, quite satisfied the rapid transit needs of the time. It was the failure of the omnibus companies in Birmingham that induced the corporation in 1870, as soon as the act was passed, to obtain the right to lay down tramways and to lease them to companies. Only two lines were constructed then and opened in 1873. The lines in Glasgow were laid in 1870. During the next five years little progress was made. The following statistics show the comparatively slow growth of tramway enterprise from 1876—the first year in which the Board of Trade made returns—to 1890, when electric traction began to make its appearance. The returns of earnings and operating expenses are not given until 1878:

	No. of Under-takings.	Mileage Constructed.	Capital Expended.	Gross Receipts.	Nett Receipts.	Passengers Carried.
			£	£	£	
*1875-6.....	44	161½	2,253,121	.....	.....	.....
*1876-7.....	46	214	3,343,265	.....	.....	.....
1877-8.....	60	269	4,207,350	1,145,465	230,956	140,001,223
1878-9.....	76	321½	4,861,847	1,192,347	193,040	150,881,551
1879-80.....	99	368	5,665,465	1,342,933	229,839	173,067,103
1884-5.....	155	811	11,967,629	2,613,438	637,859	367,702,307
1889-90.....	158	948½	13,735,769	3,214,743	811,943	526,369,328

In 1890 the new progressive municipal movement began to take effect, and development was more rapid, so that, instead of retarding progress, municipalities have stimulated it, as the following statistics show:

	No. of Under-takings.	Mileage Constructed.	Capital Expended.	Gross Receipts.	Nett Receipts.	Passengers Carried.
			£	£	£	
1890-1.....	158	963½	14,162,650	3,429,686	798,757	565,621,478
1894-5.....	154	982½	14,956,343	3,733,690	855,201	661,760,461
1898-9.....	169	1,122	18,603,222	4,879,602	1,204,043	924,820,247
1900-1.....	213	1,305½	26,799,023	5,961,062	1,435,883	1,198,226,758

\* Returns for these two years not issued by Board of Trade.

## Municipal Activity.

The following table shows the comparative growth of municipal and company undertakings:

	MUNICIPALITIES †			COMPANIES.		
	No.	Capital Expended.	Mileage.	No.	Capital Expended.	Mileage.
		£			£	
1882-3.....	28	2,227,192	170½	113	7,523,635	501
1888-9.....	29	2,959,633	243¼	125	10,704,958	706¼
1892-3.....	35	3,105,636	274¼	118	10,998,516	686½
1896-7.....	42	4,459,488	367¼	117	10,405,622	663½
1897-8.....	47	6,116,687	450	116	10,376,282	614
1898-9.....	61	8,134,530	519½	108	10,468,692	602½
1899-1900.....	70	10,203,604	584¼	107	11,532,284	592¼
1900-1.....	99	14,057,664	689½	114	12,741,359	616

While public bodies, at the end of that year (March, 1901), operated only 27 per cent. of the total undertakings, they earned 43 per cent. of the aggregate net revenue and carried 46 per cent. of the total number of passengers conveyed. Since 1901 the greatest development in municipal tramways has taken place, while many of the companies figuring in the above returns have been expropriated.

Almost all the large cities not only own but operate their own tramways. The London County Council is now operating 72½ miles of lines; it is building, or has prepared plans for constructing, over 100 miles of lines; it owns and leases 42 miles north of the Thames. Glasgow municipality owns and operates 103½ miles within the city and in the suburbs. Liverpool has 90 miles. Manchester is building a system to the same extent. Bradford, Leeds, Huddersfield, Sheffield, Newcastle, Dundee, Aberdeen and others now own and operate municipal tramways. Bristol—where a company operates—, Edinburgh—where the lines are owned by the city but operated by a company—, and Birmingham—where the time for municipalization and working has only just arrived—, are the principal exceptions. In England and Scotland, therefore, companies are, with these exceptions, confined to the smaller towns, and even many of these, such as Dover (population of 41,782), Ayr (population 28,624), Wallasey (population 53,580) and Yarmouth (population 51,250) have successful municipal undertakings.

† Those owned by municipalities; some are operated by private companies.

## Private Undertakings Successful.

The tables upon the preceding pages, combined with the following

	Ratio Working Expenses and Receipts.	Net Revenue Per Mile.	Return on Capital Expenditure.
	Per Cent.	£	Per Cent.
1877-8 .....	75	858	5½
1878-9 .....	83	601	4
1879-80 .....	82	624	4
1884-5 .....	75	786	5¼
1889-90 .....	74	856	5¼
1890-1 .....	76	829	5½
1894-5 .....	77	870	5¼
1898-9 .....	75	1,073	6½
1900-1 .....	76	1,100	5¼

show that company undertakings have yielded a fair return. Good dividends have been paid whether the municipality constructed the lines as in Manchester, Glasgow and Birmingham, or whether the companies have been allowed the free use of the streets during the currency of their franchise, as in London and other cities. The Dundee Tramways Company was paying 12½ per cent. when it was acquired, the Manchester company 10 per cent., the Leicester company 5 per cent., the Glasgow company 10 per cent., the London company 10 per cent. There is no doubt that, even with horse traction, under the Act of 1870, there was scope for enterprising companies to pay a dividend.

## Reasons for Municipalization.

One of the elements which helped forward the municipalization movement was the bad management of companies. They allowed their undertakings to become dilapidated toward the latter years of their leases. They were only concerned in making a general scramble to pay as much in dividends as possible. They paid their workmen so disgracefully that there were serious strikes in several cities, interrupting traffic. The cars were dirty, the horses bad, the service irregular, and in Glasgow, Liverpool, Leeds and other cities there was general discontent at the incapacity of the tramway companies and the inefficiency of the service provided. In some towns the companies broke down altogether.

It is continually said that the Act of 1870, limiting the life of the companies to twenty-one years, retarded electrification to the

great injury of electrical engineering, etc. We can only speculate on that subject. We have nothing to show that companies would have introduced electric traction sooner had the principle of municipal ownership not been there. Judging by analogy I should say that electric traction has been little retarded if at all. Private enterprise did not show any desire to introduce horse tramways. English railway companies are only just beginning to think of electrifying their suburban lines. British manufactures in all branches of engineering have fallen behind American invention, initiation and enterprise.

The first town to operate as well as own tramways was Huddersfield. No company would undertake to provide tramways in the town, which has very steep streets. The municipality obtained power from the Board of Trade to work the tramways if no company made a reasonable offer to work the lines. No offer came forward, and the municipality since 1881 has worked the tramways. Horse traction was tried and then steam. Many accidents happened to the engines and the municipality had to pay heavy compensation, but was quite ready to make up the deficiency. The benefit to the population of this hilly town from cheap rapid transit was worth more to them than the subsidy from local taxation.

Plymouth Town Council was obliged to work the tramways itself owing to the failure of a company. The lines had not only been badly laid, but they were in continual need of repair. There was endless wrangling and difficulties with the company, finally ending in the municipality acquiring its rights in 1892. No other company came forward with an offer to work the tramways and the municipality proceeded to do so itself. This is one of the most striking examples in favor of municipal ownership. The municipality at once put on new cars, obtained better horses and spent £42,000 on reconstructing the system. The result was that the traffic was promptly doubled and the service vastly improved. The motives which actuated the municipality in their enterprise are recorded in the minutes of the Corporation, as follows:

"The main objects of the corporation in purchasing the tramways were to get rid of the company management, which had failed to give the public an efficient tramway service and which had exhibited so considerable disregard of public inconvenience and remonstrance, and in the second place to place the direction and control of the policy of the tramway extension in the hands of the Council; as representing the general body of ratepayers, for the general benefit of the borough, instead of leaving the

tramway system to be developed and extended for the purpose of securing profits to shareholders without regard to local necessities."

Blackpool, a popular seaside resort in Lancashire, has worked its tramways since 1893 and was the first town in England to install the conduit system. It afterwards removed it, owing to the interruption of the service caused by water.

The inefficiency of the tramway service in Leeds long caused dissatisfaction, and in 1894 the Corporation took over the undertaking and began to operate it, working it partly by horse, partly by steam and partly by electricity.

When the limited franchises granted by the Act of 1870 began to expire, almost without exception all the great municipalities decided to exercise their powers under section 43 of that Act and acquire the undertakings at their depreciated value. Before a council can do this, it is necessary not only for a majority of votes to be recorded in favor of purchase, but for two-thirds of the members to be in the council chamber. Several grotesque attempts have been made by reactionary members to stay out of the room in order to defeat purchase, but the pressure of public opinion and the ridicule cast upon them invariably brought them into line.

From a commercial point of view, there was not great advantage in having to pay only a moderate price for the plants. The towns have paid what the lines and equipment were worth as they stood, but as, in most cases, they had at once to reconstruct the lines and to discard the horse equipment for electric traction, it would have been cheaper in the end to have built new lines. The fact that conversion has had to follow purchase—almost immediately in most cases—has naturally increased the administrative difficulties. The municipalities had to undertake a new service, lay down new lines and introduce a new system with as little interruption to traffic and with as great a saving of capital expenditure as possible. A town like Dover, which started right off with electric traction, had a decided advantage.

In this transition period, when lines are being continually reconstructed and extended, it is difficult to make comparisons between municipal and company operations. I am able to give, however, one interesting comparison between municipal and company management of the same system, which is found in Sheffield. The Sheffield City Council decided to purchase the company's tramway undertaking in 1895. The company was unpopular, its service was bad, but it hoped



at the last moment to defeat the municipality. A standing order was still before the House of Commons prohibiting municipalities working tramways. But the Sheffield Corporation succeeded in getting rid of that standing order just in time. Sheffield took over exactly the same system, with the same staff, etc., as the company had. It at once proceeded to improve the service, to link up connections and reduce fares. The following is an interesting comparison between the last twelve months of the company's operation and the first twelve months under the Corporation:

COMPANY'S LAST YEAR, ENDING 30TH JUNE, 1896.		CORPORATION'S 1ST YEAR, 1STH JULY, '96-30TH JULY, '97
9	Approximate street miles of tramways (double lines)...	9
692,855	Number of miles run.....	733,262
6,566,033	Number of passengers carried.....	8,453,078
£39,995 2s. 4	Receipts from passengers.....	£46,517 2s. 4
13. 85s.	Receipts from passengers per mile run.....	15. 22s.
£4,443 18s.	Receipts from passengers per street mile of tramway...	£5,168 11s. 4
34. 48	Average number of cars running daily.....	36. 48
3,621	Average number of passengers per car per week.....	4,569
£22 1s. 1	Average receipts per car per week.....	£25 2s. 10
312	Average number of horses.....	340
9s. od.	Average cost of forage per horse per week.....	7s. 9½d.

It will be noticed that on the same system nearly two million more people were carried by the Corporation, and that the reduced fares led to increased receipts. It should also be noticed that the increased wages bill amounted to £2,423. By studying the interests of the over-worked staff which it took over, the City Council also promoted the comfort of the passengers.

#### Delay in Adopting Electric Traction.

It is frequently stated that the Tramways Act of 1870 not only delayed the introduction of electric traction, but is also responsible for the backward state of the electrical engineering industry in this country. It is pointed out that much of the electric plant now used in England is of American manufacture, and the opponents of municipal ownership blame municipalities for thus injuring British manufacturing industries. These statements, as a matter of fact, are entirely beside the mark. The backward state of electrical engineering in England—the fact that electrical manufacturers were not ready to supply the home market—has nothing to do with municipal ownership.

American manufacturers are supplying machinery in all branches of British industry. Every shoe manufactory has to rely on American machinery. The Post Office goes to Chicago for its telephone instruments. The Morgan-Gardiner Co. of the same city are now equipping hundreds of mines in England with electrical coal cutting machinery. American labor saving machinery and machine tools are everywhere. They are all of American invention as well as of American manufacture.

When the boom in electric traction came along, the American manufacturers were ready to supply the market; the British manufacturers were not. It was just the same when, a few years ago, American manufacturers anticipated the great boom in cycles and flooded the English market with machines. It did not require great perspicacity to perceive, eight or nine years ago, that in a very short time street railways in British cities would be electrified, whether the municipalities exercised their option to take control or whether the company system continued. The electrical manufacturing engineers did not rise to the occasion. They were not ready to supply the demand. Consequently the first orders for electrical plant had to be sent to America and Germany, and the British manufacturers are still unequal to supply all existing demands.

While tramway legislation is not responsible for the backward state of English engineering enterprise, there is no doubt that it did somewhat retard the introduction of electric traction. There are, however, many compensating advantages for the few years' delay, for the towns which exercise their option under this measure will have absolute control over the streets in the future. There will no longer be vested interests, no questions of franchise, no trouble with wealthy companies seeking to gain control in local politics.

#### London Tramways.

The advantages of municipal ownership, even when it does not involve direct working of the tramways, are considerable. The municipality in leasing its lines at a yearly rental imposes terms, it regulates fares, provides for workmen's cars and fair treatment for employees. This has been admirably illustrated in the case of the London County Council and the North Metropolitan Tramway Company. The Council acquired this company's system under the Act of

1870, but gave it a new lease until 1910. Under the old conditions the company paid no franchise and was under no control. It went on comfortably paying itself 10 per cent. or more, but made no effort to improve its system or study the public. Under the new conditions the company pays the council \$225,000 a year, and  $12\frac{1}{2}$  per cent. of the increase in its receipts. It must set aside \$180,000 a year to maintain and reconstruct the lines. Fares must not be raised, and workingmen's trams at low fares must be run up to 8 A. M. The hours and wages of the employees must not fall below the best treatment of the employees on any company's system in London. The company must recognize trade unions and has been fined because it dismissed some employees on the ground that they were members of a union.

Undoubtedly the County Council made a good bargain financially with the North Metropolitan Company. Compared with the council's own tramways south of the river, the rental of the north lines makes a return on the capital of  $4\frac{3}{4}$  per cent. as against  $3\frac{1}{2}$  per cent., taking the reserve into account, obtained from the south system. On the other hand, the average fare on the municipal cars is 88d., as against 1.12d. on the company's. One-cent fares are introduced on the council's tramways, and 50,000,000 of workers are carried annually at this rate, thereby saving them over £100,000 a year. The employees are better treated; there is no friction as has existed on the North Metropolitan system.

In other cases agreements have been made between companies and municipal authorities for leasing tramways owned by municipalities. The municipality provides the capital, constructs the tracks, and the company provides the equipment. The company pays the municipality sufficient interest to liquidate its loan within the period of the lease and also a share of the surplus profit. For instance, a company has entered into arrangements for working the electric lines in the west and northern suburbs of London for a period of forty years. The company pays the municipality  $6\frac{1}{2}$  per cent. on the expenditure, and the balance of net profit is divided between the two in the proportion of 45 per cent. to the municipality and 55 to the company.

#### **Fares on American and British Tramways.**

Many comparisons are made between the system of fares on American and British street railways. The American system has been

adopted on the Central London electric underground railway, where a uniform 4-cent fare is charged. This line is chiefly used for long-distance traffic. The system which is preferred in England is that of cheap fares for short distances. It will be found, I think, that while America gives many examples of long distances at cheap fares the profit of the street railway companies comes chiefly from the short-distance passenger. For one person who wants to travel a long distance ten want to travel short distances. The long-distance journeys are only performed by people going to and coming from town. Experience has proved that what is most needed in British towns is a low fare for short distances. The average fare in Glasgow is less than two cents. The majority of the people travel short distances for one cent. The same is the case with the London County Council's municipal tramways. Again, on the Metropolitan underground railway in London, which has a total distance of 64 miles, while the fares vary from two cents to \$1.80, the average fare is less than four cents—again demonstrating clearly that low fares for short distances suit the English public. It will not be possible to get uniform fares in English towns until that fare is reduced to the minimum coin usually current, viz.,  $\frac{1}{2}$ d., or one cent. The prospect is not impossible, as, with the economies which will follow electric traction, the average fare, which is now in a number of cities  $\frac{3}{4}$ d., or  $1\frac{1}{2}$  cents, may before long be reduced to a universal  $\frac{1}{2}$ d.

#### Glasgow Street Railways.

The best example of successful operation is to be found in Glasgow. Under the municipality the passengers carried on the street railways have increased in seven years from 57 millions to  $163\frac{1}{2}$  millions. The revenue from the cars, notwithstanding the great reduction in fares, has increased from 10.26d. to 11.90d. per car mile. So great, however, were the profits of the undertaking that the corporation have been able to reconstruct the whole of the permanent way out of revenue. It has also set aside large sums for depreciation, and accomplished the feat of keeping the track in perfect condition and of writing down the whole of the horse equipment out of existence—all from the profits of seven years. Early last year, therefore, the Glasgow Corporation were able to start its electric traction system unburdened by any capital expenditure for the old horse car service. Besides lay-

ing aside ample reserve funds, the Corporation pays a mileage rate to the city funds, amounting last year to £12,500, on the same basis as the former company did. The capital of the tramways is borrowed for thirty-one years. Two and a half per cent. is set aside as a sinking fund and invested at 3 per cent., which will wipe out the loan in that period. New loans incurred are treated in the same way. It is the custom of municipal undertakings—well illustrated in the case of Glasgow—to keep down the capital account, and to draw largely from their revenues for renewals, etc.

#### Depreciation.

The advocates of company interests have recently been attacking municipalities for not setting aside sufficient sums for depreciation, as such. Criticism of this kind is prompted, not in the hope of setting municipal undertakings on a more stable financial footing so as to better safeguard the interests of the future taxpayers, but is advanced simply to lead to overburdening the undertaking as it stands, so that from a commercial point of view comparisons with company work may be more favorable. Moreover, should generous depreciation lead to a temporary balance of accounts on the wrong side, which means drawing from local taxation, the object of the critics is achieved as their whole aim is to present municipal ownership in the worst possible light and sympathize with the local taxpayers who have to find subsidies for losing concerns.

It is generally held that in the case of municipal works for which loans for short periods are granted, it is adequate, provided the works are maintained in a thoroughly efficient state out of revenue, to set aside only a sinking fund which will liquidate the debt in about twenty years' time. In regard to tramways it is advisable, after the first few years of the system, to adopt a more generous policy, and in addition to providing a sinking fund, which would liquidate the loans in twenty-eight or thirty years, to build up a reserve fund for contingencies, and perhaps also set aside amounts for depreciation. It is considered that a reserve fund is necessary in view of possible changes in methods of transit. The profits from the municipal operation of tramways promise to be so large that there seems to be little difficulty, once all the undertakings are in going order, to carry the public at very low fares, and also to provide depreciation and reserve fund. The

method adopted in Glasgow has been, not to aim at making a profit in relief of local taxation, but to carry the greatest possible number of persons the longest possible distance at the lowest possible fares. Under this system it would not in the least disturb a municipality if in one year, for some accidental or exceptional reasons, it had to draw from a local taxation fund in support of the tramways.

#### Municipal and Company Plants Compared.

A critic of municipal ownership in a paper read before the Society of Arts this week made a comparison between Dublin and Glasgow intended to show the advantages of private enterprise in Dublin. The only point in favor of Dublin is that it had electric traction a year or two before Glasgow, but the people of Dublin are now paying dearly for giving away their tramway franchises, as the following comparison between the two cities for last year shows:

	DUBLIN COMPANY.	GLASGOW MUNICIPALITY.
Length of single track (miles).....	92.80	103.53
Total capital expended.....	£1,039,286	£2,041,036
Total revenue ... ..	£242,515	£583,239
Operating costs.....	£148,827	£263,220
Percentage of costs to revenue.....	61	45
Gross profits.....	£93,688	£320,019
Return on capital.....	8.94 p. c.	15.68 p. c.
Interest.....	£25,580	£59,340
Depreciation or sinking fund.....	£1,000	£36,975
Percentage to capital.....	.19	1.81
Surplus.....	£67,108	£223,704
Passengers carried.....	45,513,734	155,243,378
Number of car-miles run.....	6,664,914	11,935,099
Number of passengers per car-mile.....	6.82	13.01
Revenue per car-mile.....	8.35d.	11.71d.
Revenue per passenger.....	1.22d.	.90d.
Cost per passenger.....	.79d.	.41d.
Total power costs per unit.....	.79d.	.60d.
Operating costs per car-mile:		
Power costs.....	.79d.	.53d.
Traffic costs.....	2.27d.	3.23d.
Maintenance and renewals.....	.62d.	.81d.
Management expenses.....	1.66d.	.72d.
Total operating costs.....	5.36d.	5.29d.

It will be noticed among other things that although the routes are much shorter in Dublin the average fare is more than a third of a cent higher than in Glasgow and that management expenses per car mile is double under the company.

The following is a comparison between results in small towns.



The towns are near each other; they have about the same population and do not differ much in character :

	CARLISLE COMPANY.	SOUTHPORT MUNICIPALITY.
Population of district served.....	45,500	48,100
Length of single track (miles).....	8.25	10.00
Total capital expended.....	£100,972	£103,500
Total revenue.....	£8,676	£15,964
Operating costs.....	£6,237	£9,395
Percentage of costs to revenue.....	72	59
Gross profits.....	£2,439	£6,569
Return on capital.....	2.44 p. c.	6.82 p. c.
Dividend or interest.....	£1,631	£3,365
Depreciation or sinking fund.....	£633	£2,885
Percentage to capital.....	.63	3.00
Surplus.....	£175	£319
Passengers carried.....	2,010,873	3,317,963
Number of car-miles run.....	323,044	389,827
Times population carried.....	44	69
Number of passengers per car-mile.....	6.22	8.51
Revenue per car-mile.....	6.23d.	9.62d.
Revenue per passenger.....	1.00d.	1.13d.
Cost per passenger.....	.74d.	.68d.
Total power costs per unit.....	1.67d.	1.67d.
Operating costs per car-mile :		
Power costs.....	1.49d.	1.75d.
Traffic costs.....	2.42d.	3.00d.
Maintenance and renewals.....	.11d.	.21d.
Management expenses.....	.61d.	.82d.
Total operating costs.....	4.63d.	5.78d.

These results are for the first year of the undertaking in each case.

#### Public Operation More Progressive.

The municipalities are proving to be the pioneers in street railway enterprise. Huddersfield, for instance, led the way in using cars for post-office purposes. It placed collecting boxes on the cars and carried postmen and telegraph messengers, for which privileges the post-office paid an annual fee. The cars were also used for parcel delivery. Blackpool municipality gave the first example of the conduit system in England. Leeds experimented with the surface contact system of traction. Wolverhampton has laid down the Lorain system for a year's trial. Bournemouth is the only town now using the conduit system. Bradford contributed toward an experiment in electric traction to help the company get rid of its steam cars.

Half penny (one cent) fares were popularized by Glasgow. Free transfers were initiated in Sheffield as soon as the system was

municipalized. Until the London County Council acquired the tramways no night cars were run in London—no cars were on the streets after 12 o'clock, and they did not run early enough in the morning. The companies followed the example of the Council, but have now discontinued the system. Then the municipalities study the convenience of the population in all sorts of ways. They put on more workmen's cars for early morning service; Nottingham Council and others run special cars to football and cricket fields; Blackburn carries school children at farthing (half cent) fares. The municipalities also have led the way in providing their motormen and conductors with neat uniforms. They have treated their staff well, and the public has benefited by greater courtesy and politeness on the part of the men. Companies were in the habit of disfiguring the cars inside and out with advertisements; municipalities permit only very little advertising on cars, and in some cases—as in Glasgow—abolish it altogether. In every case municipalities have striven to provide the best possible services and to charge the lowest possible fares consistent with profit. They have sent deputations to European towns to investigate existing systems of traction, and each town has given the benefit of its experience to others. Unquestionably the British municipalities have in all directions shown more enterprise in street railway matters than companies have.

#### Civil Service Problems.

By the end of the present year, most of the large municipalities will have passed through the transition period. They will have got rid of all their horse cars and have installed complete systems of electric traction. At present the outlook is most promising. In fact, there is every indication that municipal street railways, from an administrative as well as a commercial point of view, will prove to be easily successful. The work of managing the undertakings is apparently simpler than any other department of municipal industrial work. Once the service is complete and is maintained in a thorough state of efficiency, the administration runs almost automatically. Glasgow and other corporations that have been early in the field have devised efficient systems for managing the staff and distributing the work. The managers, engineers and other chief officials, all secure their position through their own



## MUNICIPALIZATION IN GREAT BRITAIN

merits. They are removed from political or party influences, and they are not susceptible to sordid temptations. The committees in charge of the street railways have so far been composed of capable business men, whose only desire has been to see that the undertakings were managed for the good of the whole community.

The opponents of municipal ownership foreshadow that danger will arise from increasing the number of municipal employees, and that the tramway motormen and conductors will take part in elections, to serve their own ends. It is even suggested, as a remedy for this supposed danger, that all municipal employees should be disqualified from voting. On the other hand it is pointed out that street railway companies in the past have tried to use far greater influence upon public opinion than ever the employees are likely to do, and have used it solely with the hope of preserving their privileges. It is also shown that municipal employees are not likely to be so short-sighted as to advance unreasonable demands, knowing as they do that such conduct will only lead to reaction and the injury of their own class. As to their influence at election times, no indication of danger from it has yet arisen. It is possible for a representative of the tramway employees to be elected on a city council, but not solely by the vote of the employees. Trades unionists have representatives at councils already, but so far they have only tended to increase the representative character of those assemblies. Then, again, the influence of employees at election times is not so great as their numbers would indicate, as many of them live outside the municipal area of the authority which employs them, and a considerable minority have not qualification as voters, as the long period of qualification required and other difficulties deprive a large portion of the working population in every city of their votes.

### Causes of Delay in Electric Lighting.

There are several reasons why the development of electric lighting was delayed in England. In the first place, the gas companies had created a powerful vested interest and used all their influence against the introduction of a competitor. Most of the large gas undertakings, including those of Vienna, Berlin and other German towns, were established by English companies. English entrepreneurs did not show the same readiness to adopt electricity either at home or abroad.

Unfortunately, the early undertakings were more in the nature of

financial speculations than of serious industrial enterprises. Before 1882, numerous companies were promoted which were over capitalized and had to go into liquidation. This undue inflation injured the electrical manufacturing industry as well as checked the progress of electric lighting. Another drawback was the existence of cheap gas in almost every town. Thus Parliament paid no attention to electricity supply until 1882 when, as a result of the wild speculations, an act was passed to check the creation of a new lighting monopoly. Several large towns, including Birmingham, had just paid heavily to buy out the gas companies, and Mr. Chamberlain and other progressive statesmen of the time wished to guard the public against a repetition of the same conditions with regard to electric lighting.

The Act of 1882 was a stringent measure which only allowed an electric lighting company twenty-one years' existence, following the precedent of the Tramways Act. It was soon seen that this period was too short. Things were practically at a standstill for the next six years—until an act was passed in 1888 extending the franchise of companies to forty-two years, at the end of which period municipalities could compulsorily acquire the undertakings without paying anything for good will or prospective profits.

It is frequently stated that these conditions (of the franchise) have seriously checked electric lighting in England. The facts do not bear out this conclusion. In many German towns, including Berlin, the conditions of the franchise are much more severe and the period is shorter, yet the development in electricity has been greater. Moreover, all municipalities outside London have to redeem the whole of their capital in electrical undertakings within the period of twenty-five years. This is an equated period; the plant will have to be renewed within the twenty-five years, the buildings will last much longer, while the land is a perpetual asset. Yet the municipalities have to pay the whole of their debt within that period, besides paying interest and making due provision for maintenance, renewals, etc. During the forty-two years companies should be able to underwrite their works sufficiently to meet the conditions of purchase without loss. Compared with companies, therefore, the municipalities are handicapped, particularly in the first years of their undertakings, as they have to pay interest on the capital and make provision for a sinking fund for one

year—and in some cases two years—before they can obtain any revenue.

#### Conditions Imposed on Undertakings.

Both municipalities and companies are put under certain restrictions. They are subject to the regulations and inspections of the Board of Trade, and to a maximum price of 8d. per kilowatt or Board of Trade unit. In London the powers of companies were allowed to overlap, but the companies arranged among themselves to avoid competition. Whether electricity, therefore, is supplied by a company or a municipality, it is in each case a monopoly, with only one exception, and that is in the old city of London. Here the company exacted an excessive price, made possible by the irregular and illegal action of a Lord Mayor and other members of the common council of the old city, and competition was permitted.

Among the conditions imposed upon municipalities are that, within two years of the granting of the order permitting them to engage in electric lighting, they must "lay down suitable and sufficient distributing mains for the purpose of general supply throughout every street or part of a street specified" in the order. After the expiration of eighteen months the undertakers must be prepared, on the demand of residents, to lay down distributing mains "throughout every other street or part of a street." Unless the orders are acted upon within these periods, the Board of Trade has power to renew or to revoke them. Six or more owners or occupiers of premises in any street may require the undertakers to lay down distributing mains in the street after the expiry of the periods mentioned. The system of supply must be sanctioned by the Board of Trade before the supply is started. The current may be charged for on several methods which must be approved by the Board of Trade. The Board of Trade may, on the application of any consumer or of the undertakers, appoint electrical inspectors, whose duties will be to inspect or test periodically all the lines and works, certify meters, etc. The conditions imposed by the Board of Trade are comprehensive and include regulations concerning every part of apparatus, protective clauses for the Postmaster General's telegraph and telephone lines, etc. Other clauses authorize reference in the protection of gas and water mains, opening streets, etc.

## Growth of Municipal Plants.

The capital now invested in municipal undertakings is £25,000,000, compared with £22,500,000 for companies. Half of the capital of the private corporations is in London. The largest provincial city where companies are still in possession is Newcastle-on-Tyne, with a population of 214,000. According to the latest statistics the municipalities hold 308 orders, confirmed by the Board of Trade, for supplying electricity, while companies own 139. The number of undertakings is less than the orders as several are amalgamated. The following tables show the growth of municipal electricity and the way it has overtaken and surpassed companies:

Year.	No. of Undertakings.	Capital Authorized.
1896.....	33	£ 1,967,000
1897.....	57	3,509,317
1898.....	93	5,734,938
1899.....	124	8,531,167
1900.....	169	13,776,372
1901.....	192	19,165,495
1902.....	213	23,427,410
1903.....	228	25,000,000

The following statistics show the extent of the supply by municipalities and companies in the case of undertakings established:

YEAR.	LAMPS CONNECTED (EQUIVALENT TO 8 C. P.)				BOARD OF TRADE UNITS SOLD.	
	No. of Undertakings.	Municipalities.	No. of Undertakings.	Companies.	Municipalities.	Companies.
1896.....	33	664,816	27	1,366,582	9,637,638	20,566,128
1897.....	50	1,218,835	39	1,730,474	17,837,874	25,465,302
1898.....	63	1,738,625	49	2,368,102	27,161,351	32,964,125
1899.....	88	2,716,586	70	2,943,297	42,476,726	42,672,341
1900.....	114	4,052,465	87	3,607,923	68,232,688	56,883,927
1901.....	168	5,787,205	110	4,648,814	125,232,043	71,209,691
1902.....	197	7,836,187	99	5,023,534	162,505,417	84,404,279

## Municipal and Private Enterprise Compared.

Comparisons between company and municipal operations are becoming difficult owing to the disappearance of the companies. I present a few comparisons from various sources, all of which tend to show that municipalities supply electricity cheaper than companies. The following table is taken from the *Manual of Electrical Undertak-*



ings, edited by Mr. Emile Garcke, managing-director of the British Electric Traction Company, and one of the leading opponents of municipal ownership:

YEAR.	No. of Undertakings.	Revenue From Sale of Current.	Working Expenses.	Profit.	Per Cent. of Profit on Capital Expended.	Price of Current per unit.
<i>Municipalities.</i>						
1900-1.....	75	£ 988,404	£ 555,682	£ 432,722	4.90	d. 4.06
1901-2.....	97	1,477,087	923,246	553,841	4.30	3.82
<i>Companies.</i>						
1900-1.....	43	1,053,291	580,548	472,743	5.45	5.26
1901-2.....	45	1,180,354	702,121	478,233	5.00	4.94

While it is compulsory on both companies and municipalities to make full returns of electricity supplied to the Board of Trade, that authority has only recently published a general return giving general results. A report was issued last fall, but only dealt with returns for the year 1900. The following are the main figures which it contains:

	Municipalities.	Companies.
Capital expended.....	£14,843,122	£10,954,188
Receipts.....	1,661,760	1,383,779
Working expenses.....	1,057,728	962,146
Gross profit.....	604,032	421,633
Allocated for redemption or renewal purposes ( <i>i.e.</i> , reserve, depreciation, repayments and sinking fund; during the year).....	322,525	183,008
Do. do. (total to end of 1900).....	1,080,030	746,067
Interest on loans (local authorities).....	397,579	.....
Net profit (companies).....	.....	321,880

If we go into the figures with a little more detail, we find that the equivalent return on capital expended in the case of municipalities was 4 per cent., and in the case of companies  $4\frac{1}{2}$  per cent. On the other hand, the price charged by municipalities was 3.64d., or a little more than 7 cents, and the average price charged by companies was  $9\frac{1}{4}$  cents. Had the municipalities charged the same price as the companies did, and sold the same quantity, their revenue would have increased by £420,000. The following are some other comparative figures from an analysis which appeared in the *Electrical Engineer*, an independent trade journal, referring to the London and provincial undertakings:

	LONDON UNDERTAKINGS.		PROVINCIAL UNDERTAKINGS.	
	Municipalities.	Companies.	Municipalities.	Companies.
Average capital expenditure per kilowatt installed.....	£96.5	£115	£78.5	£98 5
Average price per unit sold.....	3.58d.	4.72d.	3.15d.	4.45d.
Average cost per unit sold.....	2.38d.	2.59d.	1.75d.	2.34d.
Gross profit as percentage of outlay..	4.75	5.98	5.18	4.65
Units sold per kilowatt plant installed.	917	780	695	524

In the case of the London undertakings, companies spent 19.2 per cent. more on plant, charged 32 per cent. more per unit, and costs were 8.8 per cent. more; in the case of the provincial undertakings the increases were, respectively, 25.5, 41.4 and 36.6 per cent. more.

#### Lowest Total Cost of Production.

The electrical undertakings which hold the record for cheapest production of current are the following:

WORKS.	Load-factor.	Units sold.	Total cost per unit or 1000 watt hours in pence.
	%		d.
Liverpool, Municipal.....	24.23	20,018,142	.90
Bolton, Municipal.....	17.81	3,120,709	.96
Cork, Company.....	21.21	1,701,996	.97
Bradford, Municipal.....	15.57	4,901,172	1.00
Nottingham, Municipal.....	12.97	4,094,897	1.01
Leeds, Municipal.....	11.21	3,055,165	1.04
St. Helens, Municipal.....	17.84	1,237,965	1.04
Edinburgh, Municipal.....	14.75	7,760,307	1.07
Bootle, Municipal.....	29.42	1,327,432	1.09
Stepney, Municipal.....	22.74	1,008,037	1.23
Southport, Municipal.....	14.22	1,462,407	1.23
Leith, Municipal.....	19.79	946,650	1.24

All these towns with the exception of Cork have municipal undertakings, and all, except Leeds, Edinburgh, Stepney and Leith, supply current for tramways.

Almost every large city which did not originally establish municipal works has bought out companies at a heavy price. In the case of purchase before the expiry of the franchise of forty-two years, the price is a matter of arbitration between the company and municipality. The following are some of the prices paid by large cities for company undertakings:

	Capital expenditure at time of purchase.	Price Paid
	£	£
Liverpool.....	264,711	436,474
Leeds.....	217,420	370,580
Sheffield.....	124,472	272,398
Birmingham.....	219,000	420,000
Woolwich.....	47,817	80,000

The result of the transfer of the electricity undertakings has been striking. The municipality is able to double its capital and still show better results. The following gives the experience of Birmingham :

Purchased by municipality in year.....	1899
Capital spent by company.....	£219,000
Capital paid by municipality for undertaking.....	420,000

  

FINANCIAL RESULTS.	Last Year Under Company. Year 1899.	Most Recent Under Municipality. Year 1900-1
Capital outlay.....	£269,366	£543,657
Units produced.....	2,252,692	3,040,822
Receipts, all sources.....	£43,246	£55,409
Working expenses.....	18,799	28,175
Gross profit.....	24,447	27,234
Percentage to capital.....	9.44	5.31
Provided for depreciation and sinking fund.....	£6,137	£6,597
Net profit.....	18,310	20,637
Working expenses per unit.....	2.00d.	2.22d.
Average price charged for current per unit.....	4.38d.	4.20d.

Similar results were shown in the case of Leeds, Sheffield and other large cities. In every case the average price was at once reduced, with the result that the sale of current increased enormously. The municipality proved in every case the more enterprising.

#### Attacks on Municipal Electricity.

Some of the recent attacks on municipal ownership have been directed against municipal electricity. The following are the chief points advanced :

(1) That municipalities are in the habit of securing a right to supply electricity and holding it for several years without executing it, playing a dog-in-the-manger policy;

(2) That they have delayed establishing electricity works in order to protect their gas works from competition;

(3) That the works frequently involve loss, which falls on the local taxpayer.

(4) That the municipalities create an artificial demand by using electricity for public lighting to an unnecessary extent;

(5) That they do not allow sufficient funds for depreciation.

In reply to these points I would say that some municipalities have delayed executing orders. They have adopted a cautious policy, but they could not delay more than two years without getting their orders renewed, and if during that period any company had had sufficient enterprise to apply for an order the municipality could not have delayed. The Board of Trade had always power to prevent municipalities adopting a policy of procrastination. It is true that municipalities hold nearly 100 orders for works which are not yet constructed. Most of these orders were granted last year, and all of them are for small towns that could be more economically supplied by taking their current from existing undertakings, by joining together or by taking their supply from a large power company, unless they can run electric street railways for which, no doubt, some of them are waiting.

It is not correct that municipalities have delayed because they have gas works. On the contrary, the towns which have had the experience of municipal ownership of gas have been the readiest to profit by the experience to establish electricity works. The absence of the municipal ownership of gas was the chief cause which led Liverpool and Sheffield city councils to buy the electric lighting companies in these cities.

It is true that municipalities make a loss sometimes in the early years of their undertakings. So also do the companies. The losses shown, for instance, in the Board of Trade Return above referred to for the year ended March, 1901, which are chiefly of small concerns, were caused by the towns having to pay their redemption of debt funds before their undertakings were well established. The losses of these early years are promptly turned into a profit. That the losses for the year ending March, 1901, were of a temporary character, is shown by the accounts for next year, ending March, 1902. Thus, Stepney turned a loss of £2,743 into a profit of £2,035, West Ham a loss of £2,499 into a profit of £1,137, Southampton a loss of £2,793 into a profit of £718, Crewe a loss of £618 into a profit of £949, Darlington a loss of £926 into a profit of £90, Leigh a loss of £101 into a profit of £81, Motherwell a loss of £553 into a profit of £70, and so on. There are only one

or two municipal undertakings throughout the country which have involved any loss necessitating support out of local rates. Salford and Bath are the most notable examples, and in these and other cases the causes would very likely have arisen had companies controlled them. In fact, examples of bad management and financial loss under companies are by no means rare. The number of companies which worked at a loss in the year 1901 was thirteen, a proportion just about the same as in the case of municipalities.

There are two ways of interpreting a loss. The opponents of municipal ownership regard the undertakings as working at a loss when they are unable to pay their contributions to sinking funds as well as interest. If the sinking fund payments were suspended for the first few years, as they ought to be, these examples of losses would disappear. How this system handicaps municipalities is shown in the case of Islington, a Metropolitan borough. Before the electrical works were even started, the financial charges amounted to £1,332; consequently, the first year, when the revenue was small, there was a deficit of £1,836. In the second year that deficiency was reduced to £320. The year following there was a surplus of £220.

Municipalities have not been nearly so ready to light their streets by electricity as they ought to have been, and, instead of blaming them, as the opponents of municipal ownership do, for adopting electricity for public lighting, they ought, on the contrary, to have condemned them for delaying its extension. From a financial point of view, the municipalities have little to gain, for there is not a great profit in arc lighting and the municipalities do not charge an excessive price. They compare well with companies—in fact, some towns supply public lighting at a loss. A number of them only charge 3 cents per unit for current (1,000 watt hours).

#### **The Question of Depreciation.**

It is constantly alleged that municipalities show a profit on their electricity supply as well as on their other undertakings by failing to make adequate provision for depreciation. This subject has provoked a good deal of discussion. The supporters of municipal trading adopt this attitude: Considering that loans on electricity undertakings, outside London, have to be repaid within a period of twenty-five years, that such payment has to be begun before the works are thoroughly

established, that during the period of repayment the works have to be maintained in a thorough state of efficiency, no depreciation is necessary. The Municipal Electrical Association has adopted this view, declaring that the undertakings "having to be maintained in a thorough state of efficiency out of revenue, no depreciation, or other writing off of capital, is necessary when the period allowed for the repayment of loans is not greater than thirty years, as the equated life of the works exceeds this period." If the period for the repayment of the loan was extended to over thirty years, then there would be more reason for building up a reserve fund or allowing for depreciation. The Board of Trade does not require a depreciation fund, and does not even make a reserve fund compulsory. The clause dealing with the disposal of profits states that after paying all charges out of revenue, including interest and sinking fund, the municipalities may, "if they think fit," provide a reserve fund "by setting aside such money as they think reasonable," and

"accumulating it at compound interest until the fund so formed amounts to one-tenth of the aggregate capital expenditure on the undertaking. The reserve fund shall be applicable to answer any deficiency at any time happening in the income of the undertakers from the undertaking, or to meet any extraordinary claim or demand at any time arising against the undertakers in respect of the undertaking."

"The undertakers shall carry the net surplus remaining in any year, and the annual proceeds of the reserve fund, when amounting to the prescribed limit, to the credit of the local rate as defined by the principal Act (1888), or at their option shall apply surplus, or any part thereof, to the improvement of the district for which they are the local authority, or in reduction of the capital moneys borrowed for electricity purposes.

"Provided always, that if the surplus in any year exceed £5 per cent. per annum upon the aggregate capital expenditure on the undertaking, the undertakers shall make such a rateable reduction in the charge for the supply of energy as in their judgment will reduce the surplus to the maximum rate of profit.

"Any deficiency of income in any year when not answered out of the reserve fund shall be charged upon and payable out of the local rate."

It will be seen, therefore, that the matter of reserve fund and depreciation is entirely at the discretion of the local authorities, and that they are precluded from relieving local taxation out of profits to an extent beyond 5 per cent. Still, a number of municipalities do provide depreciation, and most of them place a certain amount to reserve to provide for contingencies. Some of these cities deliberately created losses on the year in order to build up a reserve fund. For instance, the loss in Bradford was £1,500, although the city had paid £8,896 in interest, £10,309 to sinking fund and £5,920 to depreciation, making a total of £25,125. Still, according to the opponents of municipal ownership,



the Bradford undertakings showed a loss. This shows that the representations of losses on municipal undertakings are frequently of a fictitious character and that the undertakings are in a thoroughly sound commercial position.

While the representatives of companies are very anxious to see municipalities create depreciation funds, they do not carry out that policy themselves. For instance, the Board of Trade Return for the year 1901 shows that "companies put aside by way of depreciation and reserve £182,162, equal to  $1\frac{3}{4}$  per cent. on the capital expended, or less than the municipalities had to allow for sinking fund payments, which, with £30,332 placed to reserve, was equal to  $2\frac{1}{8}$  per cent. on the capital laid out. The statistics also show that the municipalities had already repaid £628,312 of capital, and had £275,585 in sinking funds—two amounts which are equal to over 6 per cent. on the total capital expenditure."

While, therefore, it is not essential for municipal electricity works to allow for depreciation when their capital has to be repaid in twenty-five years, the increasing economies of production will enable them to depreciate and also to build up reserve funds. With the combination of street railways and electric lighting, the growing demands for electricity for power purposes—only just beginning—still greater economies in production will follow. There is also some advantage to be obtained by the burning of refuse and garbage in destructors connected with the generating stations, thus utilizing the heat. This system is in operation and is found to work with advantage, but is carried out more in the interest of general municipal housekeeping than of benefiting the electricity department.

#### Light and Power Combined.

Combined generating stations for street railways, and electric light and power have been generally adopted. Glasgow is the only city which has deliberately constructed a separate generating station for street railways, and it is now supplying its spare current to the lighting department. The London county council, not being the electric lighting authority for the Metropolis, has been obliged to erect its own generating stations for its tramways. Liverpool provides the best illustration of the great possibilities of cheap electricity from the combined municipal ownership of street railways and lighting. The street rail-

ways department takes its current from the electricity department. The following figures show the progress of the undertaking:

Year.	Lighting and Power.	Tramways.	Total Units.	Total Cost of Production Per Unit or Kilowatt.	Average Price Per Unit or Kilowatt.
				d.	d.
1896 .....	1,452,511	.....	1,452,511	....	....
1897 .....	2,188,556	.....	2,188,556	2.17	5.36
1898 .....	2,812,086	103,609	2,915,695	2.38	4.43
1899 .....	3,845,749	1,883,728	5,729,477	1.40	2.89
1900 .....	4,888,653	6,675,682	11,564,335	1.33	2.17
1901 .....	6,235,634	13,782,508	20,018,142	1.02	1.94
1902 .....	7,295,504	15,890,579	23,186,083	.90	1.90

We see here the rapid reduction in price with the growing demand. If Liverpool did not adopt the policy of relieving local taxation from its surplus lighting profits, the price would be still less. At present the tramways have greatly surpassed the lighting department in consumption of current. Before very long, however, the balance may be reversed. English manufacturers are only just beginning to use electricity for motor purposes. For domestic purposes it is hardly used at all, except for lighting. When, as in Liverpool, the price is coming down to 3 cents per unit or kilowatt, or perhaps 2 cents for power purposes, the field for the profitable use of electricity becomes unlimited. Electricity will take the place of steam for power purposes, just as it is displacing gas for lighting. In twenty-five years' time, when the original cost of the buildings and site of the present works has been repaid, the British municipalities which have kept the ownership of electricity and street railways in their possession will bring inestimable benefits to the community.

Other fields of municipal activity might be discussed, such as water, gas, housing and telephones; and almost without exception it could be shown that municipal operation has been more successful than private control. In the case of water supply, almost everyone admits the superiority of public operation. This is conceded by Mr. Porter. Outside of London there are comparatively few cities of importance that do not own water works.

In the case of gas supply there is a larger number of persons who question the advisability of municipal operation, but experience has definitely shown that municipalities sell gas at a lower price, give better service, pay higher wages, require shorter hours of work, conduct

their plants as economically, often decrease taxation through the profits made, are more progressive and ready to adopt new inventions than private companies. Those interested may be referred to a monograph by Dr. Maltbie, published in September, 1900, issue of *MUNICIPAL AFFAIRS*, where the statistics are fully presented and analyzed.

The housing question has also been discussed in the quarterly of the Committee on City Affairs, and although my conclusions differ somewhat from those there presented, time does not permit me to discuss the matter here. A paper on telephones will, I believe, be presented by Mr. Bennett at this convention.

The opponents of municipal ownership have gone even further in their attempts to discredit municipal activity by attempting to show that public baths, markets, abattoirs, etc., have not been successfully conducted; their efforts are almost wholly confined to a discussion of the financial side of these undertakings. But in many instances there has been no attempt upon the part of cities to make these utilities yield a profit. The reasons for municipalization are chiefly sanitary, and I know of no unprejudiced person who would maintain that the question of providing public baths, of placing abattoirs under municipal control, etc., should be decided negatively because perchance there is a small deficit in some instances. The other factors involved are of overwhelming importance.

## RECENT HISTORY OF MUNICIPAL OWNERSHIP IN GERMANY.

BY EDWARD T. HEYN.

It is generally believed in America that the question of municipal ownership has already been solved in Germany. While this is certainly true when Germany is compared with America, the tendency of municipalities to assume water works, gas works, electric plants and street railways is of a comparatively recent date. The marvelous development of German cities have placed before them new problems. It is now clearly recognized in Germany that the time is past when municipalities longer need to confine themselves to tasks formerly prescribed to them by the state. Broadly speaking, it is believed that when enterprises have grown out of private into the direction of public spheres, it is the duty of the municipality to assume them. For German municipalities have learned by experience that an independent and capable management of public monopolies cannot exist when confronted by powerful private interests.

### Water Works.

The comparatively late introduction of water works in Germany has made municipal ownership easier than in many countries. In England, for example, in 1899, water works of several county boroughs were still in private possession. Of 55 German cities with more than 50,000 inhabitants, only two—Frankfurt and Charlottenburg—have water works in private hands.

German water works under municipal control are profitable undertakings, as the following figures show: Hannover pays 14 per cent.; Aachen, 17 per cent.; Halle, 22 per cent.; Breslau, 17 per cent.; Bochum, 24 per cent.; Mannheim, 53 per cent.; Cologne, 58 per cent., and Düsseldorf, 76 per cent. Water costs the city of Görlitz 1 pfennig per cubic meter, and it is sold to the consumer for 12, while in Stettin water costs 8 pfennigs and is sold at 18 pfennigs.

How Berlin came to assume its own water works is very interesting. Early in the thirties, the sewage system of the city was a miserable one. The citizen got rid of dirty water and refuse by pouring them in the street. Conditions became so bad that the police president, an energetic man named Hinckeldey, categorically called on the city council to contribute one million thaler to establish water works, a contract having been given two English gentlemen, Messrs. Fox and Crampton. The council declined to allow a pfennig for such purpose and the English contractors carried out the work themselves.

They were very successful and even in 1872 the company paid a dividend of  $11\frac{1}{4}$  per cent. With increasing profits the water company utterly neglected to extend the works or to conserve the interests of their consumers, so that finally in 1873 the city of Berlin bought the water works, and since that time has operated the plant at a profit. It is interesting to note in this connection that the independent municipality of Charlottenburg receives its water from a private company, which also supplies the municipalities of Rixdorf and Schöneberg. All these cities are practically a part of Berlin, but after all have independent governments.

#### Gas Works.

The first gas works on the continent and in Germany were introduced by the Continental Gas Company. People were very sceptical toward this "philosophical light," and considered the English managers foolish for so investing their money. Municipalities were only too glad to grant franchises to this company for a period of fifty to sixty years. When the cities finally realized that the production and sale of gas was a profitable one it was too late to take the business out of this company's hands. We, therefore, see that although the city of Berlin has its own gas works, it is yet compelled to compete with a private company, the franchise of which extends until the middle of this century. Just as it is with water, so it is with gas: most of the cities who own their own gas works operate them at a profit. Berlin in 1896 derived a profit of 411,668 marks, Hamburg, 359,341; Cologne, 815,765; Barmen, 417,138; Altona, 193,054, from the sale of gas. The city of Halle is now furnishing gas at prices at which private companies would never care to offer.

### Slaughter Houses.

A question which has not received much attention in America, but which most German cities have settled, is the one of municipal slaughter houses. The reasons which induced the German cities to municipalize these institutions were principally of a hygienic nature. It was said that it was necessary to place them under city control because they contributed so much to the infection of the atmosphere. An additional reason was the desire to prevent the sale of impure meat.

The establishment of municipal slaughter houses in Berlin was first bitterly opposed by the butchers and cattle dealers. However, the city procured them in 1881, and has managed them successfully. The butchers for some time evaded the city's prohibition against private abattoirs by taking advantage of a law which allowed communities to decide whether cattle should be slaughtered in their territory. In consequence, until a few years ago slaughter houses were to be found in suburbs near Berlin.

The establishment of municipal slaughter houses has proved to be an excellent one, because, unlike the slaughter houses in American cities, which are thoroughly centralized, cattle were killed in hundreds of small places over which control was impossible. A number of German cities such as Leipzig, Frankfurt, Dortmund and Mannheim have also introduced the compulsory insurance of cattle.

### Electric Light and Power.

The assumption of electric works and street cars in Germany, as elsewhere, is of a recent date. But German municipalities, in view of their experience with other utilities, were not so unprepared for electricity. Still, when the *Allgemeine Electricitäts-Gesellschaft* (the General Electric Company of Berlin), in the year 1884-85 asked Berlin for a franchise to establish a central electric station, electrical experts considered it a dangerous undertaking. Werner von Siemens, the father of the transatlantic cable, prophesied no good to the new enterprise. He told a number of his engineers, who asked his advice whether to enter the employ of the new company, that they would undoubtedly learn much, but at the same time agreed to take them back if they desired to return to his works. However, the *Allgemeine Electricitäts-Gesellschaft*, after many years became a large and profitable undertaking. It now has seven large works in Berlin and suburbs with a capital of 25,000,000 marks.



After private electric companies were successfully established the municipalities of Germany founded works. In 1888 the cities of Cannstatt and Darmstadt set the example. In the same year an electric municipal lighting plant was established in the free port of Bremen. For a time both municipal and private enterprise participated equally in the establishment of electric plants, but from 1895 municipal was second to private enterprise. This was due to the great industrial prosperity which caused the establishment of many works in private hands.

In 1896, to the two forms of ownership a third was added, by which the plant is the property of the city but leased by the firm building it, at a regular rental, for a long number of years. This somewhat peculiar arrangement is explained by the conditions which then existed. Up to 1890 it was an easy matter for a paying enterprise to obtain from German cities franchises for the establishment and operation of electric works, for which the companies had to pay very little. But gradually the knowledge of the value of such franchises became generally known, and it was no longer necessary for the municipalities to look for private undertakers. They were in fact overwhelmed with offers of various kinds. Unlike American cities, German municipalities compelled the private undertakers to assume the whole risk, yet they were always confronted with the possibility that the cities at some future time may assume the electric plants themselves.

#### Electric Street Cars.

The change from horse to electric power was somewhat slow, because the contracts of the transportation lines run by horses did not expire until quite recently. The first attempt with electric street cars was made by Siemens & Halske, in the suburb of Lichterfelde, near Berlin. For ten years the progress in this direction was slow. In the year 1891 Germany had only three electric railroads. In 1893 there were six new roads. Only at a recent date, between the years 1895 and 1900, when electric plants proved profitable, it was decided to change from horse to electric power on street railroads. When this fact became known, people holding stock in horse car lines were offered an increase of 50 per cent. on their stock. As in other cities of the world, German electric street car lines have been very successful and stocks at one time were as high as 400 per cent. Such a condition of affairs had not been seen here since 1870. A reaction from these high figures set in during the recent crisis.

With such conditions and high prices prevailing, it need not be considered surprising that the German municipalities hesitated to purchase electric street car lines. They could abide their time, for, according to the franchises granted in Germany, municipalities reserve the right of assuming these enterprises at certain periods.

The following cities now own their own electric street car lines: Bonn, Colmar, Düsseldorf, Elberfeld, Frankfurt, Mayence, Graudenz, Cologne, Königsberg, Mannheim, Mülheim a/Ruhr, Munich, Gladbach, Münster, Oberhausen, Rheydt, Wittenberg, Witten a/Ruhr. Recently three other cities, Halle, Dresden and Nürnberg, have assumed three car lines. Halle purchased the system known as the "City Railroad," comprising some seventeen miles of track, at the price of 125,000 marks, or somewhat more than \$30,000 a mile. Last October the city of Nürnberg purchased the street car system which connects the city with the town of Fürth. Although Nürnberg received over 5 per cent. rental from this private company, it nevertheless considered it more profitable to buy the line and operate it. The company was glad to sell its system, because, owing to the expense of introducing electricity its income in the last years has been a small one. For the same reason one of the street car lines in Dresden was glad to sell its system to the city. Of 133 German cities 18, or about 14 per cent., own their own street car systems.

The most weighty question which has confronted German municipalities is how to obtain possession of street car lines at the most reasonable rates. There is no doubt that in several instances German cities have paid entirely too much for the good will and property of electric plants and street car systems. The city of Essen is now considering this very problem. The *Essener Strassenbahn* is anxious to sell to the city. The franchise, which was made thirty years ago, does not expire until 1926. The system is a very poor one, the cars are bad, the fare are unusually high and employees are poorly paid. The worst factor is that the Mayor of the city is one of the directors of the company. The company demands 21,000,000 marks for its system, while the city offers 18,000,000 marks. Experts declare that Essen could build the road for about 8,000,000 marks, and by paying 18,000,000 marks will receive a poor, neglected and used-up system. It is also said that had the city of Essen built the street car line ten years ago, it would have received a large income from its operation. The private

company made a profit of 30 or 40 per cent. on its income, and in the last three years had a clear profit of 440,000 marks.

#### Municipalization of Street Cars in Berlin.

The question first came up in 1898, when the building of several new street car systems became necessary. The municipality heard with pleasure that one of the applicants was the Continental Electric Company, formerly known as Schuckardt. The city supposed that the Continental was strong enough to compete with the *Grosse Berliner* Street Car Company, which practically enjoys a monopoly in Berlin. While negotiations between the city council and the Continental company were pending, it was learned that the latter concern was secretly negotiating with the Löwe group, a union of electric companies behind the *Grosse Berliner* Street Car Company. It was then that the city of Berlin adopted an important resolution to grant no franchises for street car lines in the future and to build the same at its own expense.

At the same time it was stated that the city did not aim to obtain a higher profit from the operation of its own street car lines than it now receives from private companies. "Such a higher profit, however, is by no means excluded and in no case is a capital or loss of interest to be expected." It was also declared that in view of the great need of a net of new street car lines the city was fully capable of running such systems. Following this up, the city of Berlin purchased the line belonging to the firm of Siemens & Halske which connects Berlin with the suburbs of Pankow and Treptow. It bought stocks of the private company amounting to five and a half million marks at the rate of 166⅔.

In view of the far-reaching step taken by the city of Berlin, great was the surprise of the inhabitants of the German capital, when the Prussian Minister of the Interior extended the franchise of the *Grosse Berliner* Street Car Company, which expires in 1919, until 1949. It was given out officially that the reason for the Minister's strange action was based on the fact that the city of Berlin could not come to an agreement with other municipalities as to the operation of the private line under its own management. However, the true reason for the lengthening of the franchise of the *Grosse Berliner* Street Car Company was a judicial one. The Berlin municipality claimed that according to the Prussian *Kleinbahn Gesetz* it had the right to decide the length of

time the franchise should be extended. On the other hand, the street car company claims that while the city can say whether or not it shall give a franchise, the right of finally granting and extending a franchise is the exclusive prerogative of the state. It also admits that the city has the right to buy its line, after giving full compensation, but that it cannot do so unless it obtains the consent of other municipalities, which are connected by the *Grosse Berliner* Street Car Company. The situation has also been made more difficult because the *Reichsgericht*, the highest court of Germany, has rendered a decision which makes it illegal for municipalities to build roads whose competition will seriously injure private street car lines. Problems, similar to those which Berlin has recently passed through, have confronted the cities of Hannover and Cologne.

#### Elevated and Underground Roads in Berlin.

The old elevated road, known as the *Stadtbahn*, which was built twenty years ago, is still in operation and has proved a decided success. Although this road pays regular pensions to retired employees, it nevertheless, in the last year, was able to turn over to the government a dividend amounting to 3 per cent.

The new and splendid elevated and underground road, constructed and operated by the Siemens & Halske Company, has been fully described in American magazines and newspapers. To my mind its most noteworthy feature is the attention given in its construction to safety, noiselessness, architectural beauty and general good taste. For the privilege of building and operating the road the firm of Siemens & Halske pays the city of Berlin as follows: On a total yearly income of 6 million marks 2 per cent., over 7 million marks  $2\frac{1}{4}$  per cent., and in an increasing scale, for every million marks  $\frac{1}{4}$  per cent. more, but at least 20,000 marks annually.

The city of Charlottenburg receives on the annual income of the road up to 7 million marks 20-36 of one per cent; up to 8 million marks 21-36 per cent., and so in increasing scale for every million mark 1-36 per cent. more, but at least 7,500 marks annually.

#### Advertising Rights Leased.

While the German municipalities have freely granted franchises to private companies, unlike American cities, they have never given these privileges without proper compensation. German cities own various

utilities not heretofore mentioned, which they rent to private companies. Berlin, for example, has two public monopolies which deserve notice. The first is the public advertising monopoly which is now in the hands of Nauck & Hartmann. In all parts of the city and on every street there are billboard columns, known as *Litfass-Saulen*. They were named after a man named Litfass. At first he paid nothing for the privilege of displaying his posters, but so great was the profit that the municipality soon exacted rental, beginning with the nominal sum of 4,000 marks annually, which was increased from year to year in reasonable ratio to his profits, till in 1891 the Litfass Company put in a bid of 280,000 marks, but as Nauck & Hartmann outbid them, they were awarded the privilege at 400,000 marks. The city of Berlin reserves for itself the best positions for its announcements, which the contracting firm must post gratis any time of day or night.

#### Municipal Drug Stores.

In conclusion, it is interesting to note that several German cities have established municipal drug stores. This business is practically a monopoly, for only a certain number of stores are allowed in each locality. The result has been that drug stores are valuable properties which are passed from father to son and can seldom be purchased. A drug store in Bochum, which in 1878 cost 186,000 marks, after eleven years of operation, was sold for 200,000 marks. A decided step in the direction of municipalization has been taken by several Hessian cities. They have established several at a cost of about 25,000 marks. The municipality receives 1,000 marks rent (five hundred marks for the franchise and five hundred marks for the dwelling), and when the business done by the druggist is over 10,000 marks, the municipality receives a rent of 1,200 marks. The city of Mayence has established municipal drug stores and exacts an annual rental of 5,500 marks.

## THE CASE FOR MUNICIPAL OWNERSHIP OF ELECTRIC LIGHTING.

BY VICTOR ROSEWATER.

The distinguishing feature of advancing civilization is the increasing power of man over the forces of nature. The rise of the modern municipality has been made possible only by the subjugation of natural forces, preparing the way for present conditions of highly developed urban life. If any one thing more than another distinguishes the great cities of to-day from those of ancient and medieval times, it is to be found in the services rendered to the inhabitants generally by their own co-operation through the agency of local government or by delegation of these functions to quasi-public corporations. In a word, what the olden city lacked most, as compared with the modern city, was those utilities provided to facilitate social life through a cheap and plentiful supply of water, light, heat, power and the means of rapid transit and communication.

In the evolution of the modern city the introduction of gas, and later of electricity, for lighting purposes, and particularly for street illumination, has played a most important role. We can with difficulty imagine what a city like New York, for example, would be if it were to have its supply of gas and electricity suddenly and permanently cut off. We can hardly realize that Rome in its palmyest days went to sleep with the setting of the sun, and that the same was true of London even up into the seventeenth century. It is said that the inhabitants of London were under an obligation from the year 1416 to hang out candles at certain hours on dark nights, but they never discharged their duty fully under the statute. The impetus vice and crime derives from darkness can readily be understood. The wonderful transformation wrought by the beginning of street lighting is graphically described by Macaulay in the first volume of his famous history, where he says:

"In the last year of the reign of Charles the Second, began a great change in the police of London, a change which has perhaps added as much to the happiness of the



body of the people as revolutions of much greater fame. An ingenious projector named Edward Hemming, obtained letters patent conveying to him, for a term of years, the exclusive right of lighting up London. He undertook, for a moderate consideration, to place a light before every tenth door on moonless nights, from Michaelmas to Lady Day, and from six to twelve of the clock. Those who now see the capital all the year round, from dusk to dawn, blazing with a splendor beside which the illuminations for La Hogue and Blenheim would have looked pale, may perhaps smile to think of Hemming's lanterns, which glimmered feebly before one house in ten during a small part of one night in three. But such was not the feeling of his contemporaries."

Gas was first introduced in London in 1807, but not generally used for street lighting until after 1817. The electric lamp, as we all know, first found practical demonstration in the exhibit made at the Paris Exposition of 1878. Its introduction and adoption in this country for both private and public illumination is a matter of the last twenty years.

The application of electricity to lighting and its perfection for practical uses came at a peculiar period of our history, so far as concerns the question of municipal ownership. Municipal ownership of various public services had been tried by American cities with varying results. The experience with municipal plants for the distribution of water had been eminently successful, while the few experiments with municipal gas works were still the subject of lively contention. It was a period in which our municipalities were busily engaged in numerous costly public improvements urgently demanded to meet the needs of rapidly growing populations. The defective condition of legislation and the meager powers reposed in our municipal corporations constituted serious obstacles to public ownership and the cities were, therefore, for the most part, helpless, as well as unprepared to take on the new functions such as would have been required by the installation of an electric lighting plant. As a result, for nearly twenty years the discussion of municipal ownership of electric lighting has continued pro and con, and while I believe much headway has been made in the direction of arousing popular sentiment to the advantages of municipal ownership, it must be admitted that public opinion is as yet by no means firmly crystallized.

#### Some Settled Points.

I believe we can all agree that several important points have been definitely settled beyond serious dispute.

1. Electric lighting is a monopolistic industry. In the early discussion of municipal ownership the principal argument on the side of

the lighting corporations was that all the evils and abuses complained of would right themselves under the beneficent operation of the law of competition. If the people of any city were dissatisfied with the character of the service rendered, or the price charged, all they had to do was to charter another electric lighting company and transfer their patronage to the one that offered the better terms. The history of electric lighting both here and abroad completely discredits this assumption. Nowhere has competition been effective. Everywhere has combination been manifested. Even where competing companies were originally chartered and enfranchised, they have all been merged into one organization, or have divided territory, completely excluding competition. It is needless to go into further details on this point. Both sides will agree that competition in electric lighting is unnecessary and undesirable, that a duplicate electric lighting service for the same territory constitutes an economic waste making necessary higher charges than would be required for a single unified plant. A potential competition exists between electricity, gas, gasoline and other lighting agencies, but competition as a regulative force between rival electric lighting concerns is out of the question.

2. Electric lighting is a public or semi-public rather than a private undertaking. The very nature of the business invests it with a public character. A corporation cannot be launched to go into the business of supplying electricity for light and power on the same plan that a corporation would be formed to embark into the manufacture of farm machinery. The plea that the public has no interest in the conditions under which electric lighting concerns operate has been abandoned. Their exclusive use of a portion of the streets, the menace of their wires to life and property, the interference of their poles and equipment with fire fighting, all constitute points of contact with public needs outside of the matter of quality of service and price regulation. The assent of the municipality is required before an electric lighting plant may be installed and the right of the public through its municipal government to exercise control even where its powers are delegated to a private corporation is fully conceded.

3. Electric lighting is subject to the law of increasing returns. In former discussion much was made of this proposition, namely, that with every additional investment of capital and labor an established plant bears more than a corresponding return from sales of product.

The point sought to be scored was that the very fact of increasing returns placed a concern once entrenched, in position to monopolize the field and to bar out all competitors. But the same importance no longer attaches to this thesis because more careful analysis of the industrial organism has demonstrated it to be from one point of view a mere truism and from another simply a measure of franchise value. It has been found that the law of increasing returns does not apply exclusively to monopolies, but is to be discerned, though perhaps within narrower limits, in industries essentially competitive, where it is traceable more particularly to effective industrial organization. That the municipal monopolies of service are susceptible of close and systematic organization goes without saying. Looked at from another standpoint, the law of increasing returns so far as it is accentuated in this and allied fields measures the variations of franchise value. If the area supplied is occupied by a steadily growing population, or by people whose demand for the service is increasing, the increment of profit that flows from expanding business accumulates at a rate in excess of that of increased expenses. Per contra, should the population for any reason fall away, or the demand for the product shrink, or be satisfied with substitutes, the value of the franchise would suffer a more than proportionate diminution.

#### Statistical Limitations.

When we come to the comparative cost statistics we meet with many difficulties. These difficulties I have already discussed in another place (*American Statistical Association Quarterly*, March, 1893), and I will concede that the best figures that have so far been at our disposal are not to be implicitly relied upon for purposes of close comparison. To undertake to figure out with precision how much, if any, advantage accrues in dollars and cents from municipal ownership as against contracts with private corporations is quite impossible from the data at our command. In the first place the comparison of contract prices by themselves is often deceptive because the amount of lighting service varies from place to place. In one city the lamps may burn but a few hours nightly on a moonlight schedule, whereas in another they are burned all of every night. Again, the length of the contract period is important because in response to an advertisement for lighting bids under contracts for one, two, three, five or ten years respectively, it

will be found that the proposals for the different terms will differ very materially. The location of the wires underground or overhead—the location of the lamps in clusters or singly on poles—their distribution over a wide or circumscribed area—all enter into the cost of service and tend to vitiate comparisons of cost between different cities. In the matter of municipal lighting plants, we have as yet no uniformity of bookkeeping by which we may be sure similar entries are made up of the same items. In many cases, moreover, we have a system of joint production in which an electric lighting plant is conducted in conjunction with other monopolies of service (with waterworks, for example), which almost defies statistical separation of cost elements.

The geographical situation also has much to do with determining the cost of the motive power—whether or not water-power may be used, or if steam, the quantity and the quality of the fuel. Still another variant lies in the percentage of depreciation which must always be more or less arbitrary. What I will admit, with reference to the use of cost statistics, is that the so-called average cost is deceptive, that it is useless to seek to represent complicated processes by a single numerical figure, that cost statistics, while in themselves most valuable, must be employed as a basis of comparison only with the utmost care with the fullest knowledge of special conditions and with due allowance for the many limitations which affect their accuracy. It must not be assumed, however, that I argue for the discrediting of cost statistics altogether; for they embody the financial experience of the various undertakings, both private and municipal, and our course for the future must be guided largely by the experiments and experiences of the past.

It is not my purpose to spread out an imposing array of figures contrasting public and private lighting plants. The officials of the census bureau have been collecting data relating to electric lighting throughout the country, but their schedules have not yet been tabulated and are, therefore, still inaccessible. When published they will doubtless supply all the materials necessary for a careful study of the conditions as they exist to-day.

#### Department of Labor Inquiry.

The most comprehensive inquiry into electric lighting plants that has been made with any official authority is that of which the results

are contained in the fourteenth annual report of the Commissioner of Labor, being for the year 1899. In this report Commissioner Carroll D. Wright and his assistants succeeded in gathering data for 952 plants in the United States, of which 320 were municipally owned and controlled, while 632 were operated under private or corporate ownership.

Realizing the difficulties of handling the statistics and the utter impossibility of finding a single unit to which the product could be reduced, Commissioner Wright divided the plants into groups according to the total horse-power capacity of their engines and classified all his material by corresponding groups. The total investment to the end of the last previous fiscal year in the 320 municipal plants operated was \$10,908,929, and that in the 632 private plants was \$113,917,815. His final conclusions expressed in the summaries bringing together by groups all the facts which could properly be compared are as follows:

"1. Average price per kilowatt hour charged in arc service: Taking up the average price charged per kilowatt hour by private plants in each group, and comparing it with the average price charged to private users per kilowatt hour by municipal plants, it is seen that in all of the groups subject to comparison except one, the average price charged by municipal plants is smaller than that charged by private plants.

"2. Average price per sixteen-candle power lamp per year charged in unmeted incandescent service: Taking up the average price charged to private users, it is seen that in all of the groups except two, the average price charged by the private plants is considerably in excess of that charged by the municipal plants; while, so far as the electricity used for municipal purposes is concerned, it is seen that, with the exception of three groups, the average cost per lamp per year to the municipality of its own service is very much smaller than the price charged by private plants to the municipality for a similar service, this cost in some cases being less than half the price charged by private plants.

"3. Average price of incandescent service per kilowatt hour to private users: Taking up the figures it is seen that in all of the groups the average price charged per kilowatt hour by municipal plants is less than that charged by private plants.

"4. Average price of incandescent service per lamp hour to private users: An examination of the table shows that this average price is less in every group containing municipal plants than the corresponding groups of private plants.

"5. Average price of incandescent service per ampere hour to private users: The table shows that the average price is less in the municipal plants than in the private, in all of the groups in which comparisons could be made, except one.

"6. Average price per lamp per year of arc lighting, by hours of service rendered: Taking up the price to private users, it is seen that in all of the groups except one, the average price charged per lamp per year is smaller in municipal plants than in the private ones. Comparing the columns showing the average price charged by private plants per lamp per year to the municipality, of lights furnished by municipal plants, it is seen that in all of the groups except one, the cost per lamp per year of lights furnished by municipal plants is smaller than the price charged per lamp per year by private plants to the municipality for the lights used in municipal service."

## More Recent Statistics.

The work begun in this inquiry by the Department of Labor has been supplemented since by annual reports upon the statistics of American cities, confined, however, to cities having a population of over 30,000, and including statistics of electric lighting only as incidental to general statistics of municipal financial and other activities. Taking the last of these exhibits published in the monthly bulletin of the Department of Labor for September, 1902, and collecting the figures therein on this subject, rearranged to bring out the salient features, we have this table embracing the thirteen cities with over 30,000 inhabitants which own and operate their own electric lighting plants:

CITY.	Census population.	Plant when acquired.	Miles mains.	Total number arc lamps.	Cost of plant.	Capital outlay for year.	Maintenance and operation electric plant.	Income from plant.	Expended for street lamps.
Chicago.....	1,698,575	1888	850	6,210	\$2,234,642	\$64,323	\$330,716	.....	\$475,687
Detroit.....	285,704	1895	481	2,055	851,655	25,147	108,244	\$6,602	.....
Allegheny.....	129,896	1890	269	1,450	406,812	6,756	98,833	3,474	.....
Columbus.....	125,560	1808	*	877	68,911	.....	107	.....	75,743
St. Joseph.....	102,977	1889	109	420	98,752	7,772	24,093	.....	400
Grand Rapids..	87,565	1899	101	544	193,309	1,267	23,568	.....	.....
Wheeling.....	38,878	1892	65	507	135,221	.....	22,771	.....	.....
Little Rock....	38,307	1888	43	218	35,557	557	9,866	.....	.....
Galveston.....	37,789	1894	*	176	65,000	1,353	23,448	.....	.....
Tacoma.....	37,714	1893	*	335	502,230	27,352	69,251	80,485	.....
Springfield, Ill.	34,159	1900	*	460	.....	3,572	.....	.....	22,667
Topeka.....	33,608	1888	66	342	77,800	1,018	13,169	.....	.....
Taunton.....	31,036	1897	65	247	158,242	4,783	29,247	29,747	8,066

\* Not reported.

† Built 1887.

‡ Built 1894.

Commenting on this table in a recent article (*Independent*, January 8, 1903), I have drawn special attention to the following points:

"1. Only two of the thirteen cities under consideration purchased the property of existing lighting companies, the others building their own plants.

"2. While the original investment is not particularly large, the capital outlay for the year is considerable.

"3. The expense of maintenance and operating is in all cases decidedly moderate without outward indications of extravagance or jobbery.

"4. Most of these cities rely on their own electric lighting plants for their entire street illumination, spending little in addition for street lamps, and that for gas and oil.

"5. Only four of the thirteen cities return an income from sales of electric light to private consumers.

"6. Commissioner Wright carefully abstains from venturing on average cost statistics, or reducing expenditures to a per lamp basis.

"By reference to other exhibits in the same bulletin, we find that of the 135 American cities of over 30,000 population, 99 own their own water-works plants, while 36 are served by private corporations; 5 own their own gas works, while 130 depend on private corporations. Of the thirteen cities owning their own electric lighting plants, three, namely St. Joseph, Little Rock and Topeka, are still supplied



with water by private corporations, while only Wheeling owns water-works, gas works, and electric lighting plant."

With these unvarnished and uncolored facts and figures before us, we can take up more intelligently the various arguments and assertions on which the advocates of private ownership of electric lighting rest their case.

#### Elements of Cost.

Rightly or wrongly, the first question asked when the subject of municipal ownership is broached is, "Will it pay?" If municipal ownership meant a heavier burden on the taxpayers of the city no other argument could command attention. But should the beneficiaries of private franchises still insist that it is more economical for the city to sublet the task of supplying its electric lighting to a franchised corporation, the answer is that the results of every investigation into comparative cost under private and public regimes contradicts their assertion. In all candor I ask, Why should a private corporation be able to supply electric light more cheaply than a public corporation? Would it be rational to believe, entirely apart from the facts and figures we have already examined, that the elements entering into the production of electricity for lighting purposes would come more expensive to a municipal corporation than to a private corporation?

The cost of production may be divided broadly under (1) capital investment and (2) expenses of maintenance and operation. Will any one contend that private corporations can borrow money as cheaply as municipal corporations? When it comes to raising the necessary funds for the capital investment, the municipality can sell its bonds at better rates than the private corporation. In the city of Omaha, where I live, municipal bonds bring a premium that reduces the interest rate down to approximately four per cent., while the public service corporations have to float their securities on a six per cent. basis and often at a discount, and I have reason to believe the same is true generally throughout the country. It is sometimes contended that the municipal corporation will have to pay more for its building sites and construction work and that it cannot buy its machinery and installation materials as cheaply as the private corporation. There is nothing, however, to support this assertion, nor is it plausible unless we assume that the public officers are recreant to their trust and that private corporations are not as liable to suffer from dishonest or scheming employees as the municipal

corporation. The manufacturers of electrical machinery certainly stand as ready to sell to municipal corporations as to private corporations without discrimination as to prices.

Of the expense for maintenance and operation, the principal items are those for supplies and fuel, for wages and salaries, for depreciation and repairs. What I have said with reference to the purchase of machinery applies with reference to supplies. There is no good reason why the municipality cannot buy as cheaply and effectively as any one on the market. These purchases are usually made by contract awarded on competitive bids whether they affect a municipality or a private corporation.

#### Question of Comparative Salaries.

When it comes to the question of comparative salaries and wages, we can cite testimony in the report of the Commissioner of Labor, already referred to, which contains a table covering these points within the respective groups into which the plants are classified, with this comment:

"So far as salaries are concerned the average cost in municipal plants is smaller in every group presented, in some cases being less than half the average cost in private plants. As regards wage costs, it is seen that in seven of the groups shown the average cost in the municipal plant exceeds that in the private plants, while in eight of the groups this cost in the private plants is greater than in those municipally owned and controlled."

From this we would be safe, certainly, in concluding that municipal plants are at no disadvantage.

As to repairs, wear and tear, and depreciation, the ownership of the plant will make no difference unless we take it for granted that the men in control of one class are less efficient and less competent than those in control of the other. Accidents are no more likely, nor the rate of depreciation more heavy on account of the different ownership of the plant.

#### Commercial Business.

In figuring on the financial saving effected by municipal ownership, we must remember that substantially all the private plants engaged in supplying electric light have a large commercial business in addition to their contracts for street illumination. In fact, for most of them, the contract for city street lighting is simply a nest-egg, while the more profitable part of the business consists in selling electricity to private consumers. In some cases private ownership undertakes to

furnish street lamps at moderate, or even losing prices, as a consideration for the privilege of exploiting the commercial lighting field. On the other hand, the municipal plant has not always been allowed to engage in commercial business, but very often has been compelled because of legal limitations to confine itself to supplying street illumination for the municipality alone.

In his notable investigation Labor Commissioner Wright feels called upon to explain that in many cases his table (of comparative cost of production) shows that:

"In municipal plants the income from private users during the year exceeded the cost of production and that apparently the city not only obtained free electricity for its own use but made a profit besides, while in other cases, mainly in the smaller plants, the cost of electricity used by the city was extremely high. In the former cases the prices charged private consumers by the municipal works were sufficiently high to reduce the cost to the city of its own electricity to a very small sum and indeed in many cases to nothing in addition to showing a large profit on the service. In the latter cases, in which the cost to the city was apparently large, the condition may be due to one or more of a variety of causes. In some instances a high cost may be accounted for by the fact that a small price is charged to private consumers and the income from this source being very small, the proportion of cost to be borne by the municipality and chargeable against the electricity used for public service becomes correspondingly large; further in small towns and cities where the service is limited the cost of operation is almost as great as would be demanded by a greater amount of service."

In analyzing the table I have constructed from the annual compilations of the statistics of cities already mentioned, I have noted that of the thirteen cities of over 30,000 population two, namely, Tacoma, Wash., and Taunton, Mass., are apparently unique in doing business on a strictly commercial basis. For the year covered by the September, 1902, report, the city of Tacoma is credited with receipts from sales of electric light aggregating \$80,485 for the year. Its expenses of maintenance for the same period were \$69,251, so that the city secured all of its 335 street lamps without cash outlay and had besides a surplus of some \$10,000 to offset the interest on its investment and the depreciation of its plant. According to the same source of information, the plant at Taunton took in a yearly revenue amounting to \$29,747 paid for commercial lights, while its expenses of maintenance were \$29,247, leaving a difference of \$500 in addition to the use of 247 arc lamps for street illumination as an offset against interest charges. To show that this result is not simply an extraordinary condition of a single year I have compiled from the Labor Bureau's annual bulletins the following tables to show the financial operations of these two municipally owned plants for a period of three years:

## TACOMA—POPULATION 37,714.

	1900.	1901.	1902.
1. Number miles mains.....	.....	.....	.....
2. Total number arc lamps.....	.....	318	335
3. Cost of plant.....	\$450,000	\$502,230	\$502,230
4. Capital outlay for year.....	15,887	54,230	27,352
5. Maintenance and operation.....	47,798	58,693	69,251
6. Income from plant.....	57,114	60,293	80,485
7. Expenses for other street lamps.....	.....	.....	.....

## TAUNTON—POPULATION 31,036.

	1900.	1901.	1902.
1. Number miles of mains.....	.....	65	65
2. Total number of arc lamps.....	.....	247	247
3. Cost of plant.....	\$141,743	\$149,640	\$158,242
4. Capital outlay for year.....	9,223	3,759	4,783
5. Maintenance and operation.....	24,758	27,299	29,247
6. Income from plant.....	38,169	23,399	29,747
7. Expenses of other street lamps.....	8,796	8,814	8,066

If these tables show anything, they indicate that it is the lack of revenue from the commercial business that reduces the financial saving effected by municipal plants cut off from private patronage to which the people of the respective municipalities are entitled.

When it comes to efficient service and reasonable prices to private patrons the municipal plant again has the advantage. As the report of the Labor Commissioner declares:

"In municipal plants profit is not usually considered as an object and the prices charged are not so generally fixed as to earn a per cent. on the investment, unless as is frequently the case, outstanding bonds render interest a charge necessary to be earned."

In another place the commissioner refers to the fact that by far the greater number of private plants show a good profit, the per cent. reaching as high as 60.45 in one instance. That such profits are incompatible with reasonable rates to the public goes without saying.

## The Cry of Politics.

But we are told that even if it were possible for the municipality to effect a large financial saving for its taxpayers and private consumers of electric light, and to secure for them the increment accruing from the steady growth of population and business, which for the private

corporation is absorbed in the franchise value, political exigencies would stand in the way. The bug-a-boo of politics is always handy for use upon timid people or those who merely seek for an excuse. Establish municipal ownership by the acquisition of an electric lighting plant, declare its opponents, and it is at once dragged into politics. That with proper civil service regulations the plant can be operated without undue political interference is certainly a possibility, and that the acquisition of such a plant would exert the strongest influence for protecting the public service from the bane of politics it is more than reasonable to expect.

On the other hand, who will deny that the private electric lighting corporations are constantly in politics? The regularly recurring necessity of securing new franchise grants, of barring out competitors or heading off holdups, of renewing contracts for street illumination, almost compel each privileged corporation to be active in politics in order to claim favors from the powers that be. In every city of any pretensions in this country, the franchised corporations constitute the most pernicious factor in local politics. They have a community of political interest that draws them together, and they exert themselves as a rule in political contests on one side or on the other with their consolidated strength.

Not content with manipulating local politics, these privileged corporations have great national organizations through which they operate in larger fields. If we would know what the electric lighting interests have undertaken from time to time, we have only to refer to the report made to the National Electric Lighting Association by Allan R. Foote as chairman of its committee on legislation the first year after that committee had been constituted:

"A year ago (1889) at the convention of the National Electric Lighting Association the question was discussed of municipal ownership of electric light plants. As a result of the papers read at the time, a resolution was adopted creating what we term the national committee on legislation, of which I was made chairman. No instructions were given to that committee. I was authorized to appoint one member from each state in making up the national committee. \* \* \* In order to unify the electric interests so they could work for their state, we instituted a movement to organize state associations. The membership of these state associations is confined exclusively to operating companies, and they are supposed to look after legislation in their own states, being assisted in their work through the work of the national committee. \* \* \* So far as giving instructions to the committee is concerned, I do not think the committee needs and instructions. The general understanding is that the committee is to take cognizance of all questions that affect your interests, whether that legislation be municipal or state. \* \* \* To provide for finances an assessment is authorized to be made which varies from one-eighth to one-fourth of one per cent. of the capitalization. \* \* \* This assessment is subject to the order of the

executive committee of the association. So it gives them the means of raising a fund, if they have use for it, without waiting to call a meeting of the association and without much delay. They can simply have a meeting of the executive committee, order an assessment and collect the funds. So far as my observation has gone there has been no disposition at all to hold back in the matter of finances. \* \* \* In my work I have to spend money and then get it appropriated afterwards, so they have a pretty good hold on me. I always bring in a bill for what I spend."

While this program was promulgated a dozen years ago, and I have no means of knowing to what extent the committee on legislation is still active, Mr. Foote's explanation by itself is enough to controvert the assertion that municipalization of electric lighting would drag it into politics. If needed, the evidence could be multiplied many times. So long as electric lighting is given over to private corporations it will remain in politics while municipal ownership offers the only avenue for taking it out of politics. It is well to bear in mind, too, that in all the stories of municipal corruption that we hear from different sections—from St. Louis to Minneapolis and from San Francisco to New York—we have numerous examples of bribe-giving and bribe-taking, arising out of special franchise grants to private parties, but none of notable importance chargeable to dishonest management of municipal lighting plants once acquired. We will admit that the municipal corporation runs a risk of loss by dishonest officers and employes, but so also does the private corporation which more often covers up embezzlement by compounding the offense. But all such crookedness pales into insignificance beside the demoralizing and debauching influence of the constant corruption of public servants by the paid agents of avaricious franchised corporations.

#### Summary.

The real question then is whether it is better for the municipality to operate its own electric lighting plant or to reserve to itself only the right to regulate with compensation for the franchise either by fixed money payment or profit sharing arrangement. If financial considerations alone were to govern, the answer would depend upon the terms agreed to, although it is hard to see how, if the city may rightfully claim part of the profit on the percentage plan, it may not with equal propriety and justice do the work itself and take it all. But other considerations ought to weigh as well. The city owes it to its citizens, who may be private consumers of electric light, to protect them against exorbitant charges, and it can do this best when it is alone interested as owner and operator. Again, the promotion of civic virtue would



strongly counsel the removal, or at least the minimizing of the festering sore of political corruption invariably produced by the barter and trade of valuable franchise privileges. Municipal ownership of electric lighting may have to wait its turn among the many demands urgently pressing upon the resources of our American cities, yet no progressive program of contemporary municipal reform will without it meet the requirements of current popular thought.

## MUNICIPAL ELECTRIC LIGHTING OPPOSED.

BY JAMES BLAKE CAHOON.

In discussing the question of municipal ownership in the United States I shall not take up the experience of countries other than our own, for the customs of foreign countries are so radically different from our own that we cannot base what we should do upon what has been, or is being, done in other countries. We must be a law unto ourselves and look at the matter in the full light of our political system, and take up the question of conserving the interests of the community in the broadest minded spirit.

### Municipalization the Work of Politicians.

The great majority of cities in this country have, and still continue to, let out the contracts for this work to the private corporation; and on the whole this has worked satisfactorily, though instances have arisen where there has been occasion for dissatisfaction with the service or with the price asked, so that the municipality has, in a measure, been forced by local sentiment and conditions to enter upon this work itself. But such instances have been rare. Where the city has undertaken the manufacture and distribution of electricity, it has usually done so at the instigation of interested parties, who have started the cry that this service, inasmuch as it serves the whole people, should be done, therefore, by the whole people. The American people are peculiarly susceptible to such an appeal as this. They are an enthusiastic people, and once their enthusiasm is aroused in favor of a project they are easily led into doing things which they would not be guilty of doing in their sober moments.

I have been through this experience several times, have seen political leaders arouse this sentiment in the people and guide them along the path tending to municipal ownership and operation, and have found the current in its favor so strong that it seemed absolute folly to attempt to check or resist it. The only way of heading off

such a movement was by fighting it like a prairie fire, *i. e.*, by starting an opposing flame, burning out to meet the oncoming rush of the greater flame. Thus, a different sentiment was started and carefully worked up. The better element of the city was taken into our confidence; they were shown the inside workings of the electric light company, what it cost to manufacture and distribute the current, what factors were omitted in the estimates of those favoring municipal ownership that had to be reckoned with in a private company. Then the experience of other cities was placed before them and the cost of operation and furnishing light, as given out by such cities, was gone into and analyzed, and the things that were omitted in making up those costs were added. Afterward the question, who will reap the benefits of a change from private to public ownership, always pertinent in our form of government, was very thoroughly discussed, and it ended up with the pretty direct proof that the politicians, who had started the agitation in favor of municipal ownership, would be the men to benefit by the change. Yet to-day we find that after many disastrous experiences, cities are still threshing over the old ground of whether it will pay them to build their own plant and light their own streets.

#### Chicago's Plant Examined.

Detroit and Chicago have done this on a more extensive scale than any other cities in the country, and if one were to go to the commissioners having these plants in charge, he would get a statement showing that it is much cheaper for cities to operate their own plant than to enter into a contract with a private lighting company. Let us examine the facts.

In 1898 the City of Boston entered into a contract with the Boston Electric Light Company for illuminating its streets with lamps which should consume an average of 500 watts of electrical energy, with a minimum of not less than 480 watts, such lamps to be of the inclosed type, or, in other words, the modern up-to-date lamp for street service. This contract was only entered into after one of the most careful investigations that has ever been made on this subject in this country, or in fact, in any country. This investigation was made by Nathan Matthews, Jr., whose fairness and ability no one would question. At the time he made his report, the cost given

to him for one light per annum, for the municipal plant of the City of Chicago was \$87.38, to which, he stated, should be added for omission on account of salaries, \$1.62 per lamp, making the cash outlay per lamp per annum \$89. Starting with this cost, he added the following: Rent value of offices used by the lighting department, \$1; taxes relinquished, \$1.64; insurance on 80 per cent. of the value of the plant and at the rate of 1 per cent., \$1.62; liability insurance, \$3.51; depreciation, \$36.60, being an average of  $6\frac{1}{2}$  per cent. on the plant and apparatus, lines and underground work, exclusive of the cost of land. Adding to this interest on the investment at 4 per cent., or \$21.84, he obtained a total annual cost, figured on a commercial basis, of \$155.21 per light per annum.

Now in regard to these items: If the city does not, on account of its owning the plant, tax itself, it is going to lose just that much revenue, which it would receive were a private plant doing the work and being taxed for it. Consequently, as it loses this revenue, which has to be made up elsewhere by increased taxes, it is only fair to add this to the cash cost of electric lighting. In regard to insurance, there is no good reason why the city should not include this charge as a private company would, and it should include liability insurance for the same reason.

#### Allowance for Depreciation.

As to depreciation, the municipal plant does not differ from the private plant, and it has been found by actual experience, extending over some twenty years, that we must take into account depreciation of the apparatus, buildings, lines, lamps and everything connected with the manufacture and distribution of electricity, with the exception of the land. It has been argued that modern apparatus is so much better than that formerly put out, that it is not now necessary to charge as much for depreciation as would have been the case ten years ago. But it is not the simple wearing out of the apparatus that must be taken into account. We are progressing constantly; changes are being made even to-day in electrical apparatus, and what was all right ten years ago, five years ago, two years ago, must be discarded and thrown into the junk heap because new inventions bring about economies which render it imperative for us to throw away the old apparatus, though it may be in good

operative condition. It is useless to say that electrical apparatus has reached its highest point of development or even that *electrical* apparatus will be used ten years from now. We simply know that we have had to throw away apparatus and probably will have to do so in the future. When electricity came in, cities practically did away with gas as an illuminant; their lamp posts became worthless and went into the scrap heap; so in like manner the next ten years may bring something to the front that will cause us to throw away all our electrical apparatus and take up a new method of lighting. For these reasons we must consider depreciation.

Haskins & Sells made a report on this plant to the Reform Club, which appeared in MUNICIPAL AFFAIRS for March, 1902, and has been widely quoted, inasmuch as it is the most complete report of costs of this plant that has ever been obtained. They show in their report that if no provision were made for a sinking fund, there would still be a loss in the years 1887-1900, inclusive, of \$49,423.11 over what the city would have paid if it had taken power from the private company at the rate which the private company charged for a small number of lamps. This is hardly a fair comparison, for the reason that if the private company had been able to operate all the lamps of the city it would have made a lower price per lamp than it has for operating only a small number, and the city could have specified the modern inclosed type of lamp in its later contract, with consequent reduction of price, incidental to the economy of this type of lamp.

Referring to Document III, 1898, message of Mayor Quincy, of Boston, giving the report of Mr. Matthews, it will be found that his estimates of cost per lamp are based on the number in operation January 1, 1898. In the report of Haskins & Sells, Exhibit D, under 1897, the capital cost per lamp is given as \$280.06, based on a total capacity of 3,850 lamps; and partly to this discrepancy is due the lower plant cost per lamp reported by Haskins & Sells. Referring to \$155.21, we find a discrepancy in the estimate of the two parties of \$17.10, due partly to the fact that Mr. Matthews took the cash cost as given him by the city authorities as a starting point. The difference between the cost as made by Haskins & Sells and that reported by the city authorities being \$8.57, the balance being largely made up in the amount allowed for insurance and depreciation, Haskins &

Sells evidently omitting liability insurance and allowing but 5 per cent. for depreciation.

It may be well to give the rate of depreciation which Mr. Matthews allows on the different parts of the plant, so that those familiar with the subject of depreciation may judge whether Mr. Matthews was in error in his allowance or not. On buildings, 4 per cent.; steam plant,  $7\frac{1}{2}$  per cent.; electric plant, 10 per cent.; poles, hoods and lamps, 10 per cent.; conduits and cables, 5 per cent.; or an average of about  $6\frac{1}{2}$  per cent. on the whole, exclusive of the land. There are two items in this that I should criticise adversely: one is the amount of depreciation on buildings, and the other, depreciation on conduits and cables. I think 2 per cent. is ample to allow for buildings and  $3\frac{1}{2}$  per cent. for conduits and cables, though this latter item ought to be split up. The depreciation on the conduits, if properly laid, should be very small, not over 2 per cent., but 5 per cent. depreciation on cables would not be too much. Making these changes would bring the average depreciation to 5.7 per cent. and Mr. Matthews' cost down to \$151.57 on a purely commercial basis, *i. e.*, considering that the Chicago plant should pay the full amount of insurance, both fire and liability, which is customary for a private plant to pay.

#### Chicago Experiment Unsuccessful.

Under Table III. of Haskins & Sells' report it will be seen that there is a considerable decrease in the cost of electric lighting as estimated by them, declining from \$138.11, the cost for the year ending December 31, 1897, to \$97.86, the cost for the year ending December 31, 1899, and increasing to \$99.88 for the year ending December 31, 1900, giving the cost per lamp hour as .039 for the year ending December 31, 1897, and .0257 for the year ending December 31, 1900. The average number of lamp hours for the last period was 3,910.

#### COST OF LIGHTING BY PRIVATE COMPANIES.

	Price of Coal Average.	C. P. Per Hour for One Cent Average.	Price of Gas Per M. Average.	Average Cost Per Lamp Hour.
Alabama .....	\$1 82	759	\$1 72	.0229
Arizona .....	8 00	250	2 00	.0489
Arkansas .....	2 87	509	2 00	.0423



	Price of Coal Average.	C. P. Per Hour for One Cent Average.	Price of Gas Per M. Average.	Average Cost Per Lamp Hour.
California.....	\$8 29	578	\$2 24	.0370
Colorado.....	3 37	894	....	.0279
Connecticut.....	4 08	429	1 48	.0344
Delaware.....	3 25	1,232	....	.0162
District of Columbia.....	....	1,111	....	.0180
Florida.....	2 45	680	2 00	.0268
Georgia.....	2 89	689	1 63	.0261
Idaho.....	....	833	....	.0292
Illinois.....	1 57	705	1 49	.0296
Indiana.....	2 01	682	1 33	.0270
Iowa.....	1 66	679	1 58	.0284
Kansas.....	2 48	565	96	.0355
Kentucky.....	1 92	799	1 54	.0272
Louisiana.....	3 37	661	2 50	.0245
Maine.....	4 85	782	1 95	.0277
Maryland.....	2 00	849	2 00	.0352
Massachusetts.....	4 58	449	1 58	.0363
Michigan.....	2 77	633	1 37	.0315
Minnesota.....	3 91	699	1 32	.0282
Mississippi.....	2 41	610	2 22	.0323
Missouri.....	2 32	594	1 76	.0331
Montana.....	7 50	734	2 00	.0281
Nebraska.....	2 93	581	2 07	.0373
New Hampshire.....	5 46	531	1 66	.0341
New Jersey.....	3 34	689	1 35	.0244
New Mexico.....	3 00	450	2 25	.0444
New York.....	3 07	735	1 68	.0264
North Carolina.....	3 40	580	1 80	.0280
North Dakota.....	5 50	1,219	2 00	.0164
Ohio.....	1 78	829	92	.0249
Oklahoma.....	4 00	688	....	.0325
Oregon.....	....	915	....	.0193
Pennsylvania.....	2 18	902	1 27	.0221
Rhode Island.....	4 16	289	1 45	.0429
South Carolina.....	3 34	884	2 25	.0228
South Dakota.....	6 00	242	....	.0826
Tennessee.....	2 01	916	1 18	.0208
Texas.....	4 12	609	1 97	.0319
Utah.....	3 00	1,062	1 65	.0189
Vermont.....	5 82	144	1 98	.0308
Virginia.....	3 36	1,001	1 19	.0189
Washington.....	3 83	985	1 93	.0210
West Virginia.....	1 45	694	50	.0268
Wisconsin.....	3 41	691	1 58	.0281
Wyoming.....	....	597	3 00	.0334
Average for United States.....	3 43	655	1 72	.0288

The above table gives the average cost per lamp hour in the different States and c. p. h. for 1c., price of coal and price of gas as furnished by private companies. The cost per lamp hour includes both 2,000 and 1,200 candle power arc lamps, and to this extent is not comparable with the cost per lamp hour in Chicago, for the reason that 1,200 candle power lamps are included, while Chicago

burns only 2,000 candle power lamps. At the bottom of the table is given an average for the whole country. This data is obtained from approximately 800 plants in the United States. I put it this way simply to show the fallacy of using the lamp hour basis as a method of comparison between cities. If we refer to the candle power hours furnished for 1c., this gives us a more accurate method of comparison, but even this should not be used by cities to determine the relative cost, but the method followed by Mr. Matthews should be used; *i. e.*, taking into consideration all the local conditions, the candle power furnished for 1c. might be used simply as a preliminary comparison, as it will show whether it is worth while to go further into details. For instance, take the state of Illinois. We find that the private plants throughout the state furnished 705 candle power for 1c., and these are divided into various small plants in the different cities in the state, no one of which is supplying any great number of lamps, the plants not being large enough to obtain the economies that may be practised by a single company furnishing the number of lamps demanded by Chicago. The number of candle power hours for 1c. furnished by the Chicago plant for the year ending December 31, 1900, was 782, whereas the average candle power hours furnished for 1c. in Delaware is 1,232; District of Columbia, 1,111; North Dakota, 1,219; Utah, 1,062; Virginia, 1,001; Pennsylvania, 902; Washington, 985; Oregon, 915; Tennessee, 916, etc.; while, of course, where the plants are small and coal is high, as in some states, the candle power hour furnished for 1c. runs low.

The cost of fuel must be taken into account, and for practical purposes of comparison we would get a better result were we to divide the candle power hours by the cost of coal per ton and compare the results thus obtained for determining whether it would be advisable from a financial standpoint for a city to further consider the question of undertaking to light its own streets. The cost of coal in Chicago is given as \$2.25; dividing 782 by this gives 347. Comparing this with the average throughout the state, cost of coal as \$1.57 and average candle power hours as 705, we get 440. The comparison should be made in the following manner: The results obtained from the divisions should be inversely proportional to the prices of coal; or  $1.57 : 2.25 :: 347 : 500$ . But dividing 705, the

average candle power for one hour throughout the state by 1.57 gives only 440, whereas, in order to do as well as the City of Chicago, other things being equal, the result should be 500. In other words, the big plant in Chicago is only doing about 12 per cent. better than the average of the small plants throughout the State, when we might fairly look for at least 30 per cent. In other words, if a big plant with an approximate capacity of 5,000 lamps cannot show a better economy than 12 per cent. over the average country plant in the same state, we may fairly assert that this plant has failed to effect any saving to the city.

#### Lower Efficiency of Municipal Plants.

In a paper before the League of American Municipalities, at the Syracuse meeting, in 1899, the writer laid down as a fundamental proposition that a municipal plant could not be operated as cheaply as a private plant, however conscientiously those in charge might try, for the simple reason that the employees in the municipal plant lack the incentives to economy which are ever present in the private plant. Later experience has only served to confirm my views. Even adopting a system of appointment on merit, and retain a man so long as he does his work well in the ordinary interpretation of the term, *i. e.*, so long as it will pass muster. His job is secure whether he tries to save the last cent for the city or whether he does not try. This is not true in the private plant. In the latter, if a man is not economical to the last degree, he very soon finds himself deposed and out of a job. A private company will not tolerate simply passable work, for the reason that they can always get men who will do good work.

Further, under ordinary conditions, no municipality ever has operated or can operate a plant so that the expenses of operation will not be at least 10 per cent. greater than the same plant operated by private enterprise. If any one will study the report of the State Board of Gas and Electric Light Commissioners of Massachusetts, giving the costs of municipally operated plants as well as private plants in that state, I think my statement will be verified.

#### Municipalization Hinders Progress.

But let us assume that the municipal plant can furnish lights as cheaply as the private plant or even a little cheaper, and look at a

totally different phase of the matter of municipal ownership and operation. The United States leads the world to-day in the manufacturing field and it does so by reason of the fact that the people have encouraged in every way possible the development and perfection of machines and processes, whereby greater economy in and the maximum of production of manufactured articles is obtained. Looking at electricity in the sense of a product, it may strictly be classified as a manufactured article; and as such, every encouragement should be extended to those who have entered upon its manufacture and distribution to cheapen their product. This was done at first, with the result that the price of this product has been more than cut in two since its first advent in a commercial way twenty-five years ago.

Electric light companies found this to be the situation: "We have placed a price upon our product which is only a reasonable return upon the investment, if we get a certain amount of business; but our losses are so great between the coal pile and the consumer that we are only getting pay for one-third to one-half of the whole product." As soon as this was realized, every central station man in the country became interested in how he could deliver a much greater portion of his product. As one problem after another was solved, he found he could cut down the price to the consumer, and by making such a cut sell enough of his product to offset the reduction in price. To-day, it has become an accepted axiom among central station men that the profits of electric lighting enterprises are enhanced by keeping up the economy of the plant to the highest degree and selling the product at as low a figure as possible to get a fair return on the investment.

A striking example of this occurred in my own practice as consulting engineer when I was called upon to reorganize an electric light plant that was not paying. Upon investigation I found that the plant had been maintaining such high prices for their product that people felt that they could not afford to use electricity for lighting and power purposes, and that the plant had not been kept up to date. About the first move was to cut the rates for motor service 50 per cent. and to adopt a sliding scale proportionate to the current consumed during the month, with a result that people who had never considered the use of electric motors very quickly

adopted them. The same process was followed in regard to electric lighting for commercial purposes, and within sixty days the number of lamps connected had increased 25 per cent., with prospect of being doubled before the season was out, and I look for a quadrupling of the number before the end of next season. The general result of the new policy is that the plant is on a paying basis and will be able to pay dividends by the end of another year.

If electric light plants are municipalized it will take away the incentive to progress toward a cheaper method of production and a cheapening of price accordingly; for it is a well-known fact that where municipalities have started into any such enterprise, so far as they were concerned, progress has ceased. Electricity is by no means fully developed, even at the present time, great as have been the improvements over the crude apparatus of several years ago, and the only way in which further improvements can be made is by the private companies forcing the manufacturers to improve apparatus. Therefore, the people at large for their own interests should do everything they can to encourage electric light companies in their efforts to secure better apparatus with the resulting economy and lower prices to the consumer. If we remove the pressure upon the manufacturing companies through municipalizing the plants, they will cease their efforts toward improving apparatus that produces greater efficiency. They might continue to improve apparatus to cheapen manufacturing cost so that they could make larger profits, but that is not what is wanted. The electric lighting man more than any other wants the best apparatus that can be made, and by best I mean apparatus requiring least repairs and showing greatest economy.

#### **Lighting Companies should be Favored.**

I have often wondered why it is that electric lighting companies have been given such shabby treatment by cities. About every city of any size has its Board of Trade, and its members do everything they can, even to the extent of giving free sites or buildings or both, to get some little manufacturing plant to come to that city; and yet, if an electric light plant is projected, it never receives the slightest assistance, but is held up in all sorts of ways, presumably because electric lighting companies are usually incorporated instead of being carried on by single individuals or by partnership arrangement. Yet it has justly

been classed as one of the public utilities; its business is to serve the people generally, and in order to convey its product to the consumer it must make use of the public streets, necessitating the granting of a franchise and a permit, as it were, to do business.

In a measure I think electric lighting companies themselves are largely to be blamed for this condition of affairs—due to giving an erroneous impression at the outset. When this business was first started people had an idea that it was a veritable gold mine irrespective of how it was managed, and those who went into it were inflated with their own importance for a time, but that time lasted long enough to make it up-hill work for all those who succeeded them. No one who knows anything of this business thinks to-day that anything can be made out of it except by practising the most rigid economy, working early and late and everlastingly hustling for business. To-day the old electric light companies are heavily capitalized, not from injecting water into their securities, but from the fact that they have paid the usual penalty for entering a new field. They paid high prices for the original apparatus, more or less crude and unsatisfactory, and in a short time it had to be replaced by a better grade, and this in turn has had to be replaced by more modern apparatus. What profits were made were promptly paid out in dividends and nothing was set aside for the replacement of apparatus. Depreciation was never thought of, hence the burden on the electric light plant is much heavier than on any other form of manufacturing plant. We do not want to stop progress in the electrical fields and fall behind the world which we are now leading. We want, on the other hand, to progress and to do everything possible to reach the maximum of economy in production and distribution of electricity so that its price may be reduced to a point where even the smallest storekeeper and the poorest family can afford to use it. Such a result can only be accomplished by leaving this in the hands of private companies and by the municipality helping the electric light plant in every way possible.

The trend of all argument on municipal ownership has been along the lines as to whether or no the municipal plant can be operated so as to furnish lights for the city at a less cost than the same quality and number of lights can be furnished by the existing company in that city. I say frankly that if the municipalities will adopt the same system of accounting as that in use by members of the National Electric Light



Association, and which has been formally adopted by that Association, and carry such a system out faithfully in all its details, the municipal plant cannot furnish light at as low cost, all things considered, as the city can obtain the same light from the local private company. The day of secrecy in the matter of accounting by electric light companies has gone by and there is not a single, modern, up-to-date plant in the whole United States which does not stand ready and willing to show to the municipality just what it costs to furnish them with their street lights and all they ask in addition to the actual cost is a reasonable mercantile profit. That every fair-minded citizen is willing they should have.

Aside from the cost and profit question, pro or con, there is a broader-minded view to be taken of the situation which may be summed up in a few words. Here is a comparatively new industry which is in process of development. Do the people of the United States as a whole want to encourage this industry and build it up and keep the United States in the van of progress by so encouraging it, or do they want to throttle it? I believe that when people come to look at it in this light, the consensus of opinion will be strongly in favor of helping the industry in every reasonable way. If I am right in my belief, the question of municipal ownership of electric light plants disappears.

## CAUSE AND RESULTS OF MUNICIPAL GAS PLANTS.

BY ALTON D. ADAMS.

### Public Interest in Gas Plants.

Individual enterprise has developed gas systems of the United States mainly in the hands of private corporations. These corporations are now doing more to bring about municipal ownership of gas plants than all other factors combined. Reasons for this fact are found in the evasion by some gas companies of their obligations to the public. General distribution of gas must be effected by use of the streets, and this use can be enjoyed only through a grant from the public. In the words of the United States Supreme Court in *New Orleans Gas Company versus Louisiana Light Company* (115 U. S. 650).

"The manufacture of gas and its distribution for public and private use by means of pipes laid under legislative authority, in the streets and ways of a city, is not an ordinary business in which every one may engage, but is a franchise belonging to the government, to be granted for the accomplishment of public objects to whomsoever and upon what terms it pleases. It is a business of a public nature, and meets a public necessity for which the state may make provision."

The supply of gas being a public calling is subject to the common-law rule that rates must be reasonable. Lord Chief Justice Hale, more than two centuries ago, pointed out the fact that rates for public service are subject to public regulation. As said by the United States Supreme Court in *Munn versus Illinois*:

"When, therefore, one devotes his property to a use in which the public has an interest, he, in effect, grants to the public an interest in that use and must submit to be controlled by the public for the common good, to the extent of the interest he has thus created."

The measure of control to which the rates for public service are subject is well stated by the above court in *Smith versus Ames*, where it was said:

"What the company is entitled to ask is a fair return upon the value of that which it employs for the public convenience. On the other hand, what the public is entitled to demand is that no more be exacted from it for the use of a public highway than the services rendered by it are reasonably worth."

Another obligation of gas corporations is to avoid the issue of securities that operate as a swindle on the investing public. In some states this obligation is fixed by statutes that require the stocks and bonds of gas companies to be fully paid at their face value in cash or property at an honest valuation. In other states the duty is simply a moral one, the law leaving issues of gas securities to be limited by the scruples of promoters or the credulity of investors.

Whatever the law may be in a particular State, there is a growing public opinion that gas companies, depending directly on a grant to use the streets, should limit their issues of stocks and bonds to the fair value of the physical property devoted to the service. By such limitation the security of investors is greatly increased on the one hand, and the danger of unreasonable rates is reduced on the other.

#### **Lack of Effective Regulation.**

The foregoing principles are very elementary, but they appear to be overlooked or ignored in some cases. Unfortunately for the public, and, as it will eventually prove, for the gas companies themselves, legislatures have been slow to fix reasonable gas rates or to put effective limits on issues of gas securities. It is not reasonable to suppose that officials of gas companies are either better or worse than ordinary men. The truth is that human nature is selfish. Unregulated monopoly cannot be safely trusted in any hands. Who would neglect a legal license to issue \$1,000,000 in shares representing a \$100,000 gas plant, if there was a good margin in the operation?

A few examples will illustrate the lack of effective regulation of gas companies. One state, Massachusetts, has made a systematic attempt to regulate gas rates and the issues of gas securities. A permanent commission, established by the legislature in 1885, exacts a sworn, annual statement of its technical and financial operations from each Massachusetts gas company, and much of the data thus gathered is published in the reports of the commission. Stocks and bonds of gas companies can be issued only on approval of the commissioners in each case, and their amount at par may not exceed the value of the physical property of the companies. As to this value the decision of the commissioners is binding. Under Massachusetts law the issue of watered securities directly by the gas companies has been in the main prevented.

**Water in Securities.**

In this respect some striking contrasts are presented in other states. During the census year of 1900 the gas companies of Massachusetts, operating nearly seventy plants that range from the very large to the very small in capacity, sold 1,000 cubic feet of gas to correspond with each \$3.98 in the par value of their outstanding stocks and bonds. For the same year the gas companies of Wisconsin sold 1,000 feet of gas to correspond with each \$3.73, the companies of Delaware 1,000 feet of gas to correspond with each \$3.61, and the companies of the District of Columbia 1,000 feet of gas to correspond with each \$3.11, in the par value of their stocks and bonds. Notwithstanding these results, the companies in the State of New York, which stands first in the production of gas, had outstanding \$8.31 in stocks and bonds to correspond with each thousand feet of gas sold in that year. The companies of Illinois, the next largest producer of illuminating gas, sold 1,000 feet for each \$8.42 in their issues of stocks and bonds. In Maryland the issue of gas securities amounted to \$12.78, and in New Jersey to \$14.16 per 1,000 feet sold during the year. Investors were let into a good thing in gas securities to the extent of \$18.79 in Alabama, \$19.94 in Louisiana, \$20.08 in Nebraska, and \$30.85 in Oregon per thousand feet sold.

**Prices Made High to Pay Dividends.**

If the holders of such securities receive a fair return on their face values the public must pay unreasonable prices for gas. Can it be doubted on the other hand that investors in many of these stocks were led to expect a much larger return than they actually get? Deducting expenses of operation and interest payments from the gross earnings of gas companies and making no allowance for depreciation, there remained for their stocks in New York 1.7, in Pennsylvania 2.1, in Nebraska 0.9, and in Oregon 0.45 per cent., as the result of operations during the census year.

Experience has shown that it is not sufficient to limit the power of gas companies as to issues of their own securities. The prohibition must extend to the use of gas stocks and bonds as the basis of securities issued by holding corporations, associations or trusts in regular legal form.

About 1889 a foreign corporation purchased most of the stocks



### GAS LIGHTING.

of four Boston gas companies to the par value of \$5,533,900 approximately, and issued first \$50,000,000 and later \$100,000,000 of its own stock and about \$12,000,000 of bonds, using the Massachusetts stocks as collateral security for the bond issue. This led to an act of the legislature, in 1894, providing for the forfeiture of the charter of any Massachusetts gas company whose stocks or bonds should thereafter be used as the basis of securities issued by a foreign corporation. A new method of watering gas securities was next applied. In 1897, the stocks of four Boston gas companies, with an aggregate par value of \$3,505,800, also a certain gas and coke plant of unknown worth, were conveyed to a board of trustees. These trustees proceeded to issue some \$17,500,000 of so-called stock and another \$17,500,000 of bonds, using the Massachusetts gas stocks, the coke plant, and certain minor obligations as security for the bonds. Subsequently, interest on these bonds has been defaulted and the trust reorganized, first with \$30,000,000 and later with \$50,000,000 capital stock. As this trust is not a corporation, the charters of the gas companies, whose stock it holds, cannot be forfeited under the existing law. The remedy, however, is obvious if the legislature chooses to apply it. Eventually, if the legislature does not apply one remedy the public will resort to another.

### Profits Excessive in Some States.

Reasonable gas rates imply reasonable profits. Reasonable profits per thousand feet of gas are not uniform in amount, partly because there is some tendency to lower investment per unit of output the larger the plant. In Pennsylvania, during the census year, the average output of gas per plant was 98.8 million feet, and the gross profits, that is the difference between income and all operating expenses except depreciation, amounted to 16.1 cents per thousand feet of gas sold. The corresponding average profit in Michigan, where the sales amounted to 30.4 million feet of gas per plant, was 16.6 cents, in Iowa, with an average of 18.4 million feet per plant, 11 cents, and in New Hampshire, where 16.4 million feet were sold per plant, 12.8 cents per thousand feet of gas.

In contrast with these figures, the gross profit per thousand feet of gas sold in Illinois was 48.4 cents, though the average output per plant there was 177.2 million feet. In Missouri the profit was 48.6

cents per thousand, and the plant output 104.2 million feet. Maryland saw 128.6 million feet of gas sold per plant at a profit of 57.3 cents per thousand. Gas plants in Colorado sold 69.2 million feet of gas each, on an average, and the gross profit per thousand feet was 56.8 cents. In Oregon the sales of gas per plant were 13.5 million feet, and the profit was 87.8 cents per thousand feet. As these profits are simply averages for all the plants in each state, and as many plants earn only moderate profits, it is hard to believe that prices in all of the plants were reasonable.

An example from Massachusetts, where the average sales per plant were 71.5 million feet and the gross profit was 37 cents per thousand, illustrates this point. A certain gas company in that state earned during the year ending June 30, 1900, a net profit, depreciation charges excepted, of 32.1 per cent. on its capital stock. During the entire period between 1887 and 1901, the annual net profits of this same company, depreciation charges always excepted, ranged from 24.3 to 69.1 per cent. of its capital stock, and were above forty per cent. in each of six years. These profits were earned in a state where a systematic attempt was being made to regulate gas rates.

No specific allowance is made here for the amount of depreciation in gas systems, because the accounts of these systems show no uniform or consistent practice as to depreciation charges. A proper allowance for depreciation is, of course, as much a part of the cost of operation as is the expense for coal or labor. Depreciation does not appear to have seriously eaten into the profits of the Massachusetts gas company just mentioned, as the entire stock of this company, no bonds ever having been issued, was sold in a lump several years since for nearly seven times its par value.

Apparently low profits do not necessarily imply reasonable prices for gas. Thus, during about a decade, certain gas companies of Massachusetts have purchased the gas they have distributed from another company, paying therefor about twice the rate at which the first named companies could have manufactured gas. Meantime the plants for the manufacture of gas owned by the purchasing companies have stood idle. One Massachusetts gas company has paid another more than \$80,000 in a single year as rental for a few hundred feet of gas mains, both companies being under the same management. In a third case one gas company has paid another, having



its plant in the same city, more than \$200,000 to refrain from competition.

It is not hard to infer that practices similar to the foregoing are common in other states, when the figures of the census report are considered. Thus, after providing for materials, wages and salaries, large sums are charged to miscellaneous expenses in many states. In the District of Columbia, miscellaneous expenses amounted to 6.1 cents, in Illinois to 11.1 cents, in Pennsylvania to 12.6 cents, in New York to 24.3 cents, in Massachusetts to 24.5 cents, in New Jersey to 39.1 cents, in Georgia to 46.1 cents, in Iowa to 54.2 cents, in New Hampshire to 61.1 cents, and in North Carolina to 87.8 cents per thousand feet of gas sold during the census year. In some states the gas companies pay as salaries only one-third to one-half as much as they pay in wages. In other states salaries equal or exceed wages.

#### Prices Lower under Municipal Ownership.

Having noted the main causes that are tending to produce municipal gas plants, some results attained in these plants may be considered. The census report shows fifteen municipal gas plants located in nine states. In the census year the average output of gas by each of these plants was 32.3 million feet, while the average for private plants in all the states was 77.2 million feet each, so that the municipal plants are at a disadvantage as to size in the cost of manufacture. In each of two states, West Virginia and Ohio, the average price charged for gas by municipal plants was 70 cents per thousand feet, the average output per plant being 107.5 million feet in the former and 37.3 million feet in the latter state. This price of 70 cents per thousand feet is lower than the average price charged by private plants in any state. Thus, in Pennsylvania, the state where the average price made by private plants is the lowest, this price was 83.2 cents per thousand feet during the census year. The average price charged by private plants in Illinois was 90.3 cents, in New York 95.7 cents, in the District of Columbia \$1.109, in Rhode Island \$1.15, and in Maryland \$1.252 per thousand feet, though the average output of gas per private plant in each of these states was greater than that of municipal plants in any state.

## AVERAGE PRICES AND OUTPUTS OF GAS IN PRIVATE AND MUNICIPAL PLANTS OF THE SAME STATES.

PRIVATE PLANTS.		STATE.	MUNICIPAL PLANTS.	
Average Output Per Plant in Million.	Average Price Per 1,000 Feet.		Average Output Per Plant in Million.	Average Price Per 1,000 Feet.
5.6 feet.	\$1.291	..... West Virginia.....	107.5 feet.	\$0.70
21.9 "	1.218	..... Virginia.....	57.5 "	.97
47.4 "	.954	..... Ohio.....	37.3 "	.70
72.7 "	1.30	..... Minnesota.....	25.3 "	1.22
27.1 "	1.29	..... Kentucky.....	12.7 "	.99
71.5 "	1.14	..... Massachusetts.....	8.8 "	1.46
104.2 "	.97	..... Missouri.....	4.1 "	1.55
30.4 "	1.01	..... Michigan.....	1.8 "	3.14
41.1 "	1.45	..... Nebraska.....	1.8 "	2.00
77.2 "	1.04	..... United States.....	32.3 "	.92

Comparing prices of gas from private and municipal plants in the same states, it appears that one small municipal plant in each of the states of Missouri, Michigan and Nebraska charged a higher price for gas than the average in private plants of the same state, but the capacity of the municipal was only a small fraction of the average for the private plants in each state. Three small municipal plants in Massachusetts sold gas at an average price higher than that of the private plants, but the average output per municipal plant was only one-eighth of that per private plant. Omitting the large plants at Boston, the fifty-nine private plants in other parts of the state got \$1.27 per thousand feet for gas, though their average output was thirty-six million feet per plant. In West Virginia, Virginia, Ohio, Minnesota and Kentucky the average prices of the municipal were less than those of the private plants, though the latter had the larger average outputs in three of these states.

For the entire United States the average price of gas in private plants was \$1.04 per thousand feet, while in the fifteen municipal plants the average was \$0.92 per thousand, though these latter plants had less than one-half as great an average output as those under private management. Leaving the five largest cities of the country out of consideration, the average price charged for gas by private plants was \$1.24, or 32 cents per thousand feet higher than the price of the municipal plants, though the average output per private plant was 34.6 million feet.

These lower prices in municipal plants were not the results of selling below cost, except in one small plant in Nebraska, where the selling price was 12 cents below the cost of manufacture. For all of the municipal plants in the United States the gross profit, or excess of selling price over cost of manufacture, was 29.9 cents per thousand feet of gas, the cost being 63 cents per thousand. For all private plants in the United States the net cost was 72 cents and gross profit 30.8 cents per thousand feet. No charge for depreciation, interest or dividends is included in any of these costs. Under the head of miscellaneous expenses the charge of all municipal plants is 12.4 cents and of all private plants 22 cents per thousand feet of gas. Investment in municipal plants was \$3.57 cents per thousand feet, and the issues of stocks and bonds by private plants amounted to \$8.47 per thousand feet of gas.

#### Superiority of Municipal Activity.

From the foregoing figures it appears that municipal plants are able to produce gas with an investment less than one-half as great per thousand of annual output as the face value of stocks and bonds issued by gas companies. With these investments the municipal plants are able to make gas at a less cost, sell it at a lower price, and earn a profit per thousand feet as great as that of much larger private plants. These results are what the American people want, and are going to have. Such being the general working of municipal gas plants it is idle to point to isolated instances that are unfavorable. It is not hard to find private gas plants that do not pay.

If gas plants are to remain permanently under private management, complete records of their operations must be made public annually. Issues of stocks and bonds must be limited to the fair values of the physical properties devoted to the public service. Rates for gas must be reduced to a point where, with honest, efficient management, they yield only a reasonable return on the physical values of the plants.

Gas companies will not be wise enough to make these changes unless compelled by law. Such laws cannot be had if the wishes of gas companies continue to influence legislators more than does the will of the people. But, if the public cannot regulate the gas plants, it will find a way to own them.

## THE GAS SUPPLY AND THE PUBLIC.

BY WALTER S. ALLEN.

The results obtained by the municipal operation of gas and electric light works in the scattered plants in this country and in those of England and Germany are brought forward very freely by advocates of this plan to support their position that this method of supply ought to be universal. But some considerations of the results and study on the spot will very often bring out a very different result from the mere assertions of success so freely heard.

Taking up first gas works, we find in this country very few which are municipally operated, the largest at the present time being that at Richmond, Virginia. This plant has always been owned and operated by the city, and, generally, honestly. It is known that it has taken quite a share in politics and that it is impossible for a negro to find employment in the works, although a large proportion of the inhabitants of Richmond are negroes.

Comparing it with private plants, we find various things which distinguish it from such works. First, the investment is large as compared with works in Massachusetts of the same size, being over \$3 per thousand feet sold, and the annual reports of the superintendent of the works have for a number of years been calling the attention of the city council to the need of large expenditures for improvement of the works which will still further increase the capital charge. The salaries paid are small as compared with those paid in private works, but the wages paid to laborers are larger. The consequence of this is that such works find it difficult to obtain the best talent among engineers and that the city council members look on the works as places in which their followers should find places.

The largest municipal works in America, those at Philadelphia, passed a few years ago into the hands of a private company by a lease made by the city. The result has been a decrease of price to the consumer, an improvement in candle power, great improvements in service,

a good return to the city, a good return to the company operating, and the removal of the influence of the gas works employees from local politics. Nothing can be shown from a practical standpoint which indicates that the consumer or the taxpayer is worse off than before the transfer, but everything shows them to be better off.

In Great Britain there are more municipal works than in any other country, and a careful study of these will show many things which do not appear from the writings of many of the advocates of municipal ownership; and it will be well to look into these things carefully before assuming that because the municipal operation of works in Great Britain is financially apparently successful that it can be imitated by any American city.

Take first the composition of the town council. It is customary to elect and re-elect for year after year the same men, and the composition of the committees which control the gas or water supply does not change from year to year; but one or two new men come on at a time and the policy of the works is kept up continuously. Then again many men of leisure—retired manufacturers and capitalists—take pride in being members of the town council and give the time, knowledge and executive ability which they formerly gave to their own business to the service of the city. This is not the case in this country, where men who take the places in our city governments are those who are actively engaged in business and cannot give the time to the care of municipal work which men in similar places do in England. As an illustration, the chairman of the gas committee in one of the larger English cities informed the writer that except for the interest which he took in the successful administration of the works, he would not accept the position for a salary of £2,500 per year (\$12,500), and this man, a retired manufacturer, is the type of many town councillors.

But more important even than the public spirit which impels men of affairs to take part in municipal affairs, is the control which Parliament and the central government keeps over municipalities. Through the Local Government Board, the state keeps control of many of the features which are left free in this country to the city councils, and this is notably true of the power to issue bonds. Municipalities may not issue bonds, except in unusual instances, without the sanction of this board, and it is necessary that good reasons shall be presented before this sanction is obtained.

It is becoming more and more apparent that thoughtful men in England are questioning whether the spirit of municipalization is not going too far, that the issuance of bonds to enable municipalities to engage in trading and manufacturing has not reached a point where the taxpayers must be considered. It is difficult to see where the end will be. Speaking on this point not long ago, one of the most prominent philanthropists in London referred to the elaborate scheme of the London County Council for providing improved dwellings for the working classes and asked the pertinent question: "Why should not the County Council provide houses for all the inhabitants of London instead of for one class?" The same applies to the management of gas works. Why should the gas consumers be made to repair streets, to build parks and libraries by paying a profit on their gas? Sir James Bell, a former Lord Provost of Glasgow, writing on the topic, says:

"Nor have the town council of Glasgow been tempted to earn a profit from their gas industry whereby to foster other but alien objects. The man who burns gas in Glasgow and its suburbs is assured that he is thereby called on to pay for gas only and not for palatial erections, for libraries or art galleries, nor for any other public object however laudable and desirable. In the gas rents the town council had the means and the right to secure and to divert substantial profits to such public purposes within the city as they might deem proper; but they have justly and prudently refrained from exercising their right, and the consumer's gas bill as nearly as practicable represents the cost of the illuminant as it is consumed."

This theory that the city gets from municipal works light at lower rates than from private companies is so prevalent that it is well to see upon what it is actually based, and it can be clearly shown that instead of there being such reductions the real fact is that the private consumer is paying for the public lighting and making a gift to the city of the whole or a portion of the street lights. In the report of the Commissioner of Labor of the United States for 1899, we have a mass of data relating to gas works, electric light works and water plants, both municipal and private, and among the tables in one of the cost of electric street lights—furnished from municipal plants. In running over the columns, we find repeatedly the statement: "No cost, commercial lighting pays more than the whole cost of production." This is, of course, plain; the consumers of light in their houses or shops or factories are charged such high rates for light that the tax laid upon them is sufficient to light all the streets for the whole community at their expense. If a law were proposed which should say: "A special tax shall be laid upon consumers of light sufficiently high to produce a sum sufficient to pay for lighting the public ways and streets of the



city," the courts would take very short time to say that this was not just and equal taxation, but when it is concealed in the guise of profits from gas or electricity sold by the municipality, it is not regarded as taxation by the public.

One feature which has been clearly developed by municipal ownership wherever found is timidity in the introduction of improvements and new methods, and it will always be found that public works follow private in whatever new things are of value. This arises from two causes: the inability to use public funds to experiment—a fundamental difficulty—and no incentive to introduce processes which promise greater savings, for there is not the same inducement to public works as there is to private capital to look for an increased return. Another fault in public works is the unwillingness to pay skilled management full wages and the consequent engagement of men of only average ability. As a concrete example, a large English city desired a manager for the gas works, but was only willing to offer a salary of £800 (\$4,000) at which price none of the leading gas engineers would take it. A good man was secured, but when it was desired to obtain plans for new works, it became necessary to go to a consulting engineer and pay him £1000 (\$5,000) for plans for these works. An offer of £1000 per year would have secured an engineer who could have planned his own works. It is rare to find the best talent engaged in public works, although in Europe it is more common than here, because a position in the public service gives a man higher social standing than it does in America, and because residence and politics play but a small part in such appointments. It is the universal custom to seek managers for public works among other public works in smaller places. In Germany this goes so far as to bring the mayors from other places. For instance, the late mayor of Berlin was mayor of Breslau when he was chosen mayor of Berlin.

Management by committees, too, is often expensive. In a large English city having gas works in three different parts of the city, there are sub-committees in charge of each works. One of these committees tried an experiment in the works which failed. In a private company this would have ended the expense, but in this city each of the other sub-committees felt obliged to try the same thing in their works. Result: £10,000 of the gas consumers' money sunk, thrown away on a matter of personal rivalry.

The best managed works in England are those where the engineers are given the freest hand, where neither favor nor politics interferes, and among these undoubtedly Glasgow stands at the head. A short history of these works, their purchase and the policy governing them should be given.

These works were started by private capital in 1817 and continued as privately owned until June 1, 1869. Parliament had been petitioned by the city to allow it to erect municipal gas works in competition with the company, but had refused to grant this privilege. In 1869 an act was passed which authorized the purchase of the works by the city. This act provided that the holders of the stock of the company upon which a ten per cent. maximum dividend was allowed should receive perpetual annuities at the rate of 9 per cent., and the holders of stock upon which a maximum dividend of  $7\frac{1}{2}$  per cent. was allowed should receive perpetual annuities at the rate of  $6\frac{3}{4}$  per cent. To secure the payment of these annuities, the properties present and future of the gas works were mortgaged, and as a further security power to lay rates at 6 pence in the pound rental was conceded. The mortgage debts of £120,000 were also assumed by the city. The price of gas in Glasgow has always been based on the actual cost of manufacture plus charges for depreciation and for sinking fund and no surplus profits have been made, the price varying up or down according to the cost. There is no thought of benefiting the gas consumer of future generations at the expense of living consumers, nor is there any thought of benefiting the citizen who does not burn gas at the expense of the consumer.

This brief history brings up a point of great interest—the policy of Parliament and the Local Government Board in regard to the acquisition by municipalities of gas and electric works. There has always been consistent action by Parliament in refusing to authorize the establishment of competing municipal gas works, and in no case has such power been granted. The law allows for compulsory purchase and provides means by which this may be accomplished, as will be shown later, but it may be well first to quote two rather remarkable statements made by advocates of municipal ownership, both of them Englishmen and believers in the eventual ownership of light companies. As regards the utility of private companies in the field of gas supply, Sir James Bell, of Glasgow, says:

"And yet the company stage in the gas industry was of great and practically indispensable value. A corporation [municipal corporation] cannot be a pioneer; it

cannot undertake speculative risks, nor can it nurse and develop, at the public expense, systems and schemes the public utility of which are only hypothetical. In this direction is the field of private enterprise; and it is right that the men who incur the risk of promoting and carrying to a practical issue any new undertaking should be allowed to reap a sufficient reward for their speculative boldness. The feasibility of manufacturing illuminating gas and of conveying it by pipes throughout an entire city had to be established; the public utility and importance of the undertaking had to be demonstrated before any corporation [municipal] would be warranted in taking up the industry. These services the joint stock companies rendered to the public, and they were justly entitled to the reward of an ample return on the capital they risked in nursing the new illuminant."

Mr. Robert Donald, of London, an ardent advocate of municipal ownership, writes as follows:

"The supply of electricity for light and power is fast becoming one of the leading municipal industries in the country. Its growth during the last few years has been phenomenal; yet it is not long since municipalities showed confidence in the future of electricity and that electric supply companies found it commercially successful. The early history of electricity supply is full of failures and mistakes."

He then gives a history of the legislation, showing that the companies were first granted rights for twenty-one years, at the end of which time the municipality might take the plant at its cost, less depreciation, and the inability of companies to do business on these terms. The law was changed in 1888 to a term of forty-two years, and if at the end of that time the company was not taken, the municipality could only exercise its right at intervals of ten years. A provisional order allowing either companies or municipalities to put in such a supply lasts for two years and becomes void unless acted under. As the municipalities often obtained these orders to prevent the establishment of companies, this provision was inserted and Mr. Donald says:

"Thus municipal authorities, while they are given every facility to undertake electricity supply, are not allowed to neglect their duty and at the same time indefinitely exclude private enterprise. \* \* \* With regard to the relative success of municipal and other electrical undertakings, comparisons are not very easily made, as there are many qualifying circumstances and special conditions. True, the limited companies have little to boast about in the way of dividends. Companies are in some cases loaded with heavy capital sunk in the experimental stage of the enterprise and in other cases feel the effect of competition by gas municipally supplied. The chief drawback to early remunerative returns by municipalities has resulted from excessive caution, the initial installation has been too small. The cost of producing a large supply is much less per unit than when the demand is small, and the more production can be equalized the greater are the profits. These facts have induced municipal corporations to offer day loads at low prices and to adopt graduated scales to prolong the period of supply. Municipal corporations have always one great advantage over electric lighting companies: they can become their own best customers; they can light their streets and their public buildings with electricity. This privilege has no doubt enabled them in many cases to establish a paying business soon, but it is not necessary to success. On the whole, municipal enterprises have been very successful. The towns which have been longest in starting have made their works soonest remunerative, as they have profited by the mistakes of others."

These quotations present as clearly as possible the reasons why private companies which started early, studying out carefully, often at

large expense the technical and local difficulties to be overcome should be allowed fair returns on the money they have risked to accomplish the results. And in England this has been recognized by the grant of a life of forty-two years to enable those whose capital has been invested a proper return. Gas companies which were granted unlimited franchises are subject to compulsory purchase; but in this event, inasmuch as it was not known at the time of granting such franchises that the companies were to be given up in order to return the capital to the owners and to recompense them for the benefit which had accrued to the community at large, more liberal terms of purchase were allowed.

Parliament has steadily refused to permit cities to erect gas works to compete with private companies, but has provided means for compulsory purchase of private plants. The price paid by the city is always determined by arbitration and is based on the capitalization of the net profits, the rate at which these profits are capitalized varying from time to time and being from nineteen to thirty-three times the amount of the profits. The main feature of the arbitration consists in determining the corrected net profits, and these are arrived at in the following way: From the books the actual cost and receipts from gas are determined. From this amount is deducted proper depreciation on each of the parts of the works, as determined by experts, and to these are added such amounts as cover new works improperly charged to expense. The corrected sum thus obtained is multiplied by the number of years' purchase, and this gives the amount to be paid after adding the increased value of the real estate of the company, determined by appraisal. By this method it will be seen that the company is not only paid for its works, but also for its good will and for all the efficiency of management which has been put into the company.

As the legislation in relation to electric light companies is so recent, the principle of municipalization was well understood, and so Parliament, in establishing the forty-two-year term aimed to give these companies time in which to lay by a sinking fund which should not call for annual payments so great as to burden the consumers, but which should, at the end of the franchise, enable the investors who had given their money to forward progress to receive their original capital back after enjoying interest on it during the life of the company. In the event that a municipality desires to purchase an electric light company

prior to the expiration of forty-two years, the same method is employed in determining its value as is done for gas companies.

It has always been the desire of Parliament that the ability of the management and the consumers should share in the increased profits made by a gas company, and to this end the orders under which the companies operate fix a maximum price of gas and a standard rate of dividend, allowing an increase in the dividend of one-quarter of one per cent. for every reduction of one penny per thousand in the selling price from the maximum price prescribed. This plan offers an inducement to the management to sell gas at the lowest possible price, whereas a fixed limitation on the dividend does not call for any attempt to reduce the selling price, but to let the works run along at just efficiency enough to keep the dividend paid.

Under the stimulus of this sliding scale, processes have been improved and economies introduced in private works which are then taken up by municipal works, and prices are often reduced below those obtained by private companies. This is not absolutely true of all municipal works, as the lowest prices for gas among the larger places in England are at Sheffield, Plymouth and Newcastle-on-Tyne, all of which are supplied by companies.

There is no official testing of gas for candle power outside of London, and the general evidence of gas engineers is that, in the absence of official tests, the companies and municipalities are both inclined to rate their candle power higher than independent tests give. The average candle power claimed in England is about 16.5.

Summing up all the foregoing, it may be said that in England, which has had a long experience in municipal operation, that it is in many places fairly successful, but that in general it presents no advantages over private ownership; that it is not, except in rare instances, managed so well as private ownership; that skilled engineering talent is not as well paid, that day laborers receive higher wages, that in price and quality there is little or no difference, that in many of the larger places politics intrudes into the employment of labor, that the members of the town councils devote more attention to city affairs and give services free to an extent which we do not know. Strikes and labor disturbances have been quite as frequent in municipal works as in private works, and scandals and bad management are not unknown.

All of these things are known in America, and here, too, there

seems less disposition to treat capital which has been put into the business with fairness than in England, as a comparison of the conditions under which gas and electric light works can be bought by the municipality will show. Again, in England no power exists to fix the price of gas or electric light outside of the company, and in the case of companies self-interest tends to reduce the price, while in the case of municipalities self-interest tends to keep the price up in those places where the profits of the works—the extra tax laid on gas consumers—is used to relieve general taxation. This has been true now for several years in Manchester, where the gas committee has recommended a reduction to the council only to have it rejected, so that the profit of \$300,000 yearly might be used for municipal work.

In this country the desire to lay this special tax on gas consumers in order to relieve general taxation or else to give municipalities more money to spend lies at the root of the desire for municipal ownership, and there is no evidence of lower cost which helps the consumer in the case of municipal plants. Neither is the plan used in Paris—of partnership between company and city and division of profits—to be commended, for this, too, leads to municipal opposition to the reduction of price in order to keep up the cities' profits. The true relations between gas companies and consumers is one of partnership; the consumer should have low prices and the stockholder good dividends; and an inducement toward lower prices should be held out by allowing the energy and ability which by good management enables the making of low prices to share in its work by receiving higher dividends at the same time.

It is very difficult to compare two gas works in the same country and still more so in different countries, inasmuch as conditions vary so greatly, but an attempt has been made here to call attention to some of the less well known points relating to municipal ownership.

A study of the last returns of the English municipalities which have gone into electric lighting shows results which are not encouraging. In Scotland, where pains are taken to charge off some depreciation and provide for sinking fund charges, the cities come out even. But in England, if the same scale of depreciation be taken as in Glasgow, the showing is very different. The *Electrical Review* shows that, of fifty-two municipal plants, twenty-six come out ahead, or even,



after allowing 6 per cent. for interest and repayment of debt, but if only  $2\frac{1}{2}$  per cent. depreciation be allowed, only five plants show a surplus.

It is often claimed that municipalities can borrow money far more cheaply than can companies in the shape of shares; but this is doubtful under laws which compel the issue of capital at a premium, which premium does not draw dividends, although it goes into the plant. Moreover, a company pays no dividend unless it earns it, but a municipality must pay interest and repay its loans whether anything is earned or not, and of course it always has the taxes to fall back upon.

The bookkeeping of American plants is generally bad, even in Massachusetts, where an attempt has been made to make it uniform, and it is only possible to compute the cost of street lighting, not to know it. In English plants it is easier. There the operating expenses include everything, even taxes, for the plants stand independent. Then, too, street lighting is paid for usually at a rate which covers the actual cost, sometimes higher, and when the books are made up the profit or loss can be understood. Each plant, too, attends to its own interest charges and repayments of loans. Outside of Massachusetts these charges are usually left to the general city funds to attend to, and outside of Massachusetts depreciation seems an unknown factor. It would be there but for the statute requirement. Again, no station figures of output can be obtained, so that it can only in rare cases be computed what the cost of electricity per kilowatt really is. Hence, in general, deductions drawn from any published figures must be accepted with great caution.

In his valedictory address to the city government of Boston in 1894, Mayor Matthews said, referring to the experience of the city of Boston in regard to the improvements of the public lands, the water supply, Quincy market and the East Boston ferries—the only municipal commercial enterprises in which the city had up to that time embarked:

"The lessons of these experiments in municipal ownership seems to be that it is possible for a city to manage these undertakings fairly well from the standpoint of private ownership and distinctly well considered as municipal investments not necessarily undertaken for profit; and that it is also possible to manage them so badly that they constitute in the end a hopeless burden the weight of which even fictitious book-keeping cannot conceal. The history of our waterworks and ferries is the record of a never ending struggle between the taxpayer on the one side and the ratepayer on the other; and in view of the unfortunate results of some of these undertakings we ought on the whole to congratulate ourselves that the results have been no worse in the others. The city should certainly decline to be drawn into such undertakings in the

future unless the necessity is urgent and the utmost precautions are taken to prevent a reduction in rates, tolls and fares below the point of profit."

This remains as true now as when it was written, and the experience of the city of Boston with the two new municipal commercial departments established since then—the electrical construction and repairs division and the municipal printing office—go far to show that, in general, the municipalities mismanage their commercial business oftener than they manage it.

A recent article in the *Nineteenth Century* by Professor Fleming, a distinguished electrician, entitled "Official Obstruction of Electric Progress," calls attention forcibly to the dangers of public ownership. The principal part of the paper is devoted to the backward condition of the telegraph in Great Britain, due to its being held as a monopoly by the State, but in regard to electric light and electric traction, Professor Fleming speaks strongly. Great Britain has to-day 400 miles of electric street railways; the United States has about 16,000 miles. In Great Britain a municipality may take away the property of a street railway at its appraised value as old material after twenty years of service. This provision of law has crippled enterprise. "To tell an investor in tramway stocks that, after passing through a long non-dividend-paying period, he has then the prospect of having his property taken from him at a breaking-up price and perhaps half his property confiscated is to warn him not to invest." Thus the business languishes and the builder of the comparatively promising railways about London must come to the United States for his material and machinery. "The obvious tendency of much recent legislation," says Professor Fleming, "is to encourage local authorities to supply those things which are common needs. Hence municipal bodies have great power in deciding the speed at which electric lighting and electric traction shall take place. In this they make haste slowly."

Up to this point only the objections to municipal ownership have been considered, and nothing has been presented as a substitute for the present evils which may exist in company management.

The proper relationship between gas companies and consumers being one of partnership, some scheme should be devised allowing a sharing of benefits by both of the partners. This is secured in the simplest way by the sliding scale. Under this plan a normal price is fixed for gas and a standard rate of dividend corresponding to this

price; then for every increase or decrease in price a decrease or increase in the rate of dividend is allowed. Under this plan a company could be granted a franchise for a long term of years, with the certainty that every inducement had been offered to private enterprise to invest its capital and every inducement offered to engineering and business ability to make the price to the consumer as low as possible in order to secure as great a rate of dividend as could be maintained. If the ratio between change in price and change in dividend is properly adjusted, the invested capital would be quite willing to allow a larger proportion of the economies of good management to go to the consumer, and in this way the benefit of the improved methods of manufacture and management would go to those directly interested.

There would be no reason in demanding any payments by the company to the municipality in the guise of a franchise tax, because this would simply tend to reduce the benefits to the consumers, and as the municipality as a whole is but slightly interested, if at all, in the price, there is no reason for exacting a special tax from the consumer for its benefit. Any franchise tax laid upon a public service company is a special tax laid upon the user of its service, and so far as the company is concerned it is merely a portion of its usual expenses, to be charged as part of the cost of supplying the service, and one which must be paid by the user.

This simple plan, which has worked successfully in London for thirty years and in other English towns for a shorter period, is self-regulating and demands no interference by government in its working. The only function which the municipality might properly exercise in regard to it would be a supervision of the quality and purity of the gas supplied.

Such a scheme, encouraging the investment of private capital and protecting the consumer, is far preferable to municipal management, with its effect on local politics and expensive operation, and it also obviates the risking of the people's money in enterprises which demand experimental work with the risk of failure.

## SUPERIORITY OF CORPORATION OWNERSHIP OF TELEPHONES.

BY U. N. BETHELL.

At the outset, I think it well to state briefly the tests which it seems proper to apply in considering the question of the control of the telephone industry. The management, whatever the ownership, owes a duty to three interests: to the general public as users of the service, to the employees engaged in furnishing it and to those who provide the necessary capital. The duty to the public demands an efficient and adequate service at reasonable rates. The employees should have fair wages, reasonable hours and proper conditions of employment. Those who provide the necessary capital should have a reasonable return upon their investment.

There can be little or no question as to the first and second of these propositions. As to the third, there may be a difference of opinion, but, in my judgment, whether the ownership is public or private—whether stockholders, bondholders or taxpayers provide the funds—there should be a reasonable return on the capital invested. It is sometimes urged that “service, not profits,” should be the aim in all public service undertakings, but the arguments generally used in support of the contention do **not** apply with much force to the telephone industry, because a telephone system, in the very nature of things, can serve but a small portion of the tax-paying public. The very highest telephonic development throughout the world, especially in large cities, whether the ownership is public or private, shows that only a small portion of the public in any place is able to participate directly in the benefits incident to the use of the telephone system. Therefore, even under public ownership, it would be unjust to require or permit the industry to be operated at a loss.

### Useless to Compare Large and Small Cities.

Serious difficulties are met with in making comparisons. It is quite useless to compare the results obtained in one city with those obtained

in another, unless the cities compared are substantially of the same size and have generally the same controlling conditions. It has been difficult for some to realize this. Many have thought that if telephone service could be furnished at a certain charge per station in a small town with profit, in a large town there ought to be a reduction instead of an increase in the amount of that charge. There seemed to be a rule operating in the telephone business which did not operate in any other business with which the commercial world was familiar.

I shall not attempt to discuss this point exhaustively, but merely point out that there is no unit or factor common to the large and the small place. The telephone station is usually taken as the unit; but while the telephone station in the small place may be the same as in the large place, the other component parts of the systems in the two places differ so widely that by using this improper unit, wrong results are obtained. The telephone station is an insignificant part of the great machine, mechanical and human, necessary to operate a large telephone system. In the very small town there are a small switchboard and a few short overhead lines, with one or more telephone instruments on each line. To provide a system for a large city you do not multiply the conditions of the small town, because you must so arrange your system that each telephone in it may be put in communication with every other telephone in it. In other words, when you erect a system with a hundred thousand stations, you do not take for a model a system with a hundred or even a thousand stations, and put in a thousand or a hundred groups of telephones, fashioned after your model, each group working separately. On the contrary, the whole mass must be welded into one working organism. There are elements of plant and elements of labor, vast in amount, in the large system which have no corresponding elements whatever in the small system.

That telephone rates per station should be higher and that costs per station are higher in a large place than in a small one, are now very generally recognized. I recall, however, that Professor Ely, in *Monopolies and Trusts*, published in 1900, referred rather skeptically to this claim, which he said was usually made by private companies. To find whether it was true or not, he said we would have to go to a place where the service is provided by public bodies.

In an official report made by a commission of the German government in 1899, the proposition was clearly stated and unqualifiedly

indorsed as correct, although up to that time the German government had proceeded in making its rates for telephone service without regard to it. In an official report the manager of the municipal telephone system in Amsterdam said the same thing, and it is now universally accepted and acted on, with but few exceptions, whether the industry is operated by private enterprise, by the municipality or by the state.\*

Such statistics as we have are based on the number of stations, and when the places compared are relatively of the same size, a fair judgment may be reached, especially on the question of adequacy, but when they differ widely in size, the figures are almost useless. With normal conditions, even under the same management, the larger the city the smaller will be the per capita development.

#### Forms of Ownership Compared.

All over Europe, with a few exceptions, the industry at present is controlled and owned by states or municipalities. In Belgium, France, Switzerland, Germany, Austria and Hungary the central government operates the industry. In Holland, the state operates the trunk lines; in the two principal cities, Amsterdam and Rotterdam, the municipalities operate the local systems; and at The Hague a private company operates. In Denmark and Norway, private enterprise under government control operates the industry, while in Sweden the state operates it, except that in Stockholm and vicinity a private company since 1890 has been in active competition with the state. In Great Britain, in most places, private enterprise operates the local systems under license from the state; in a few places municipalities operate or are preparing to operate local systems; the state operates the trunk lines. In the United States private enterprise, under government control, operates both the local systems and the trunk lines.

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\* Gentlemen who as "Independents" have gone into the telephone industry in America have come to the same conclusion. Their public announcements, especially the papers read at their recent convention in Chicago, and the published statements made by the managers of the independent enterprises in Baltimore and Cleveland, clearly and forcibly indorse the contention, which only a few years ago they apparently believed to be absurd. Mr. Bennett, from whom we are to hear on the other side of this question this afternoon, has indorsed it in his book on Telephone Conditions in Europe, and Professor Parsons, from whom we are also to hear, said in his testimony before the Industrial Commission in 1901, that there should be message rates in large cities and flat rates in small towns. He thus recognized that there were differences between the two classes of places, which made one kind of rates proper for the one class and an entirely different kind proper for the other.



In France there has been a state monopoly since 1899. On the first day of January, 1902, in Paris, with its population of 2,280,000, there were a few more than 36,000 telephones in use. France outside of Paris has a very small development. There are but four cities which have as many as 1,000 telephones each. These cities contain in the aggregate a population of 1,380,000, and on January 1, 1902, they had but 9,855 telephones in service. At the same date in the four American cities of Cleveland, Cincinnati, Milwaukee and Indianapolis, having a combined population of a little less than the French cities, there were under private ownership 45,300 telephones in the Bell systems alone.

The Paris development is due generally to the inefficiency of other means of communication; yet the Parisian development by no means equals that of cities of the same rank in America. The rate is not low; it is \$80 per annum flat, and, in addition, the subscriber buys his own instruments and pays for installing and maintaining a part of the line. The system is technically behind the times and the service is exceedingly inefficient. This is chiefly due, not to incapacity on the part of the technical staff, but to the impossibility of enforcing discipline, because on account of ownership by the public there is so much political interference with the management in the appointment and retention of inefficient operatives that the service cannot be made satisfactory. Wages are exceedingly low, and the provision made for the comfort and welfare of the employees is far below that which is to be found in any important city in the United States. The undertaking has the free use of the sewers for its cables, and the public buildings for its equipment. The administration does not publish its telephone accounts separately; it is therefore impossible to say whether the undertaking pays its way or not. It is significant, however, that although the government announced some time ago its intention to reduce the rate from \$80 to \$60 per year, it has recently announced that it will be unable to make the proposed reduction. When the state took over the business, it reduced the rate from \$120 to \$80, but to what extent this was at the expense of the general taxpayer is not known.

In the way of comparison I may say that in Manhattan and The Bronx—old New York City—having a population of but little more than Paris, there are twice the number of stations; there is the most modern plant known to the art, and as to the service the *Electrical*

*World and Engineer* recently said editorially that it was the best in the world. The *average rate* in Manhattan and The Bronx is no greater than the *flat rate* in Paris. It is generally stated that the rate in New York is \$240 per year. With more than 100,000 stations, less than 1,500—or less than  $1\frac{1}{2}$  per cent.—are at that rate. The rates in Manhattan and The Bronx are based upon a sliding scale; the small user of the service does not pay as much as the large user; each pays in accordance with the amount of service rendered to him. This, I may say in passing, we believe to be the proper way of charging for telephone service in a great city. It is being adopted generally throughout the world, except in a few places where special conditions or the inflexibility incident to government ownership prevent its adoption. It is the plan which Professor Parsons in his testimony before the Industrial Commission declared to be the proper one for a large city. I do not mean to say that he indorsed it in its details, but the general principle he indorsed as correct. Manifestly, when comparing conditions in a place where such a system prevails with those in a place where a uniform or flat rate only is charged, the only just way is to compare the *average rate* in the one place with the *flat rate* in the other.

In *Belgium* the state has maintained a monopoly since 1890, and on the first of this year, in the entire country, there were less than 20,000 telephones, about one-fifth of the number in Manhattan and The Bronx alone. Brussels, with its population of 560,000, had but 6,267; Antwerp, with its population of 280,000, had only 3,666. This inadequate development is due to a failure on the part of the state to furnish an efficient service at reasonable rates. The rate in Brussels and Antwerp for the antiquated ground circuit or single wire system, which went out of use in most American cities long ago, is \$50 per year, while that for the metallic circuit or double wire system is \$70. The discipline is extremely lax, and the service is consequently inferior. Wages are low, and the conditions of employment are hard. The telephone accounts are not separately kept; they are merged with the telegraph and mail accounts, and it is impossible to say what the results are. With such small systems as they have in Brussels and Antwerp, confined in each case to the heart of the city, and consequently operated under the most economical conditions, with the high rates that obtain, with the low wages they pay, with the freedom they have from taxation, from charges for rights-of-way and for the use of public buildings, it would

be strange indeed if they could not show a profit. But the failure to meet other tests is sufficiently striking to make the question of profits quite immaterial.

*Switzerland* has no large cities and rates for good service should be comparatively low. We hear more, perhaps, about the Swiss rates than about any other foreign rates. The charges are said to be \$20, \$14 and \$8 a year for the first, second and third years, respectively. This is only partially true. By paying these amounts one merely pays what may be called his club dues, and in addition he pays an extra charge every time he uses the telephone, and he also pays a mileage charge if his station is more than two kilometres from the central office. On this point the manager of the municipal undertaking in Amsterdam, after visiting Switzerland, said in his official report that in many cases subscribers in the larger cities or towns of Switzerland pay from \$44 to \$164 per annum for their local service only. The service is inferior, ground circuits are still in use, and the wages paid to all classes of employees are exceedingly low. Notwithstanding these facts and the very high rates paid by some subscribers, the service is used so little by the public generally that the revenues fall short of the expenses year after year. According to the *Stateman's Year Book* the deficit in 1899 amounted to over \$247,000 in a total business of but little more than \$1,000,000. In 1900 the deficit was not quite so great, but it was over \$177,000.

These conditions—inferior service, antiquated plant, low wages, a defective rate plan, which neither encourages use nor provides a sufficient revenue to meet working expenses—are not due to the inefficiency of the technical officers, because time and again they have urged upon the administration the need of improvements, the need of a more up-to-date plant, the need of putting the rates on a proper basis; but they have not been able to secure an indorsement of their recommendations. The existing conditions are entirely due to political interferences, which prevent the adoption of ordinary business principles.

Only a word as to *Austria and Hungary*. Vienna and Buda-Pest are recognized the world over as progressive cities. Yet in Vienna, on January 1, 1903, with a population of 1,674,000, there were but 15,615 telephones in use, while Chicago, an American city of substantially the same size, had, at the same time, under private ownership, 60,395—almost 4 to 1. The development in Vienna has been retarded by a

circumstance worthy of mention. A race question caused a legislative deadlock and incidentally prevented the appropriation of funds for the extension of the business. The telephone business is peculiar in this, that there must be constant additions to capital account or the system stops growing, and with telephone growth stopped in a growing community, the reasonable demands of the public cannot be met. Because of this race question, which had no connection whatever with the telephone business, the business was brought to a standstill, and the public suffered. There was a long waiting list and great dissatisfaction. In other words, because of a quarrel about another matter, the theoretical owner—the public—was annoyed, embarrassed and made to suffer material loss. Buda-Pest, notwithstanding its advanced position in many other matters, with a population of 729,000, had, on January 1, 1903, only 6,671 telephones in use, while Buffalo, with but half the population, had 12,468.

In *Germany* there has been a state monopoly of the business ever since its inception. Until 1900 there were uniform rates throughout the empire, regardless of the varying sizes of cities and towns. Thus the large cities were favored at the expense of the small ones, and the system as a whole was operated at a loss. At the beginning of this year, Berlin, with a population of nearly two millions, had 55,720 telephones in use, while Manhattan and The Bronx, only a little larger in population, had 96,364. Until 1899 the Berlin subscriber was afforded day service only; since then night service has been furnished for an extra charge. The lines are largely overhead, and many grounded circuits are still in use. The service is consequently inferior. The telephone accounts are not separately published, but the administration having officially declared the rates to be too low the Reichstag in 1899 authorized a readjustment and increase.

The commission appointed to revise the rates reported that a uniform rate of \$37.50, regardless of the size of the town or the amount of use, was unfair and unjust; that the expenses had been found to have increased, not only absolutely but relatively, as the system had increased in size; and that "the most just method is to rearrange the charges so that each subscriber shall pay according to user, thus making different rates not only for different towns and systems, but also for different subscribers in the same place." Notwithstanding this report, for the reason, as officially stated, that the public was accustomed to a flat or

uniform rate and preferred such a rate to payment by calls, new flat rates with supplementary message rates, which together only slightly altered the existing conditions, were adopted.

In *Holland* the chief points of interest are Amsterdam and Rotterdam, where since 1896 there has been municipal ownership under state charters, limited to twenty-five years. In Amsterdam the growth of the private system had been stifled by a limited franchise and a tax of 21 per cent. of the gross receipts. The municipality vigorously opposed an extension of the company's franchise, and the company, fearing there would be no such extension, made no improvements, and allowed its plant and service to deteriorate until the conditions became almost intolerable. The city offered the company what was equal to about \$47 per station for its plant, and this being refused, built a new plant, which at the end of 1899 stood at more than \$180 per station. In 1896 the company had but 1,700 stations.

It has been claimed that the city reduced rates, improved the service, increased the size of the system fifty per cent. in three years and made a profit. The company's rate was \$47.20 per year; the city adopted rates ranging from \$46 to \$36 per year, plus in every case an installation charge of \$10. In 1894, with less than 1,700 stations, the company paid a franchise tax to the city of \$17,125.20. In 1902, with more than 5,000 stations, the municipal telephone system paid into the communal treasury \$20,000. Therefore, the reduction in rates, at best but very slight, was more than offset by the loss to the communal treasury.

With its new plant the city was able to furnish and did furnish a better service than that previously furnished by the company. But the Amsterdam municipal service is far inferior to that furnished by the private systems in the Scandinavian countries or in this country. The service is slow and is little used. In 1897, with a system confined practically to the business section of the city, and with flat rates—that is, with no restriction on the use of the service because of the rates—the average use was only 1,500, or less than five calls per day. It was practically the same in 1901. This limited use is largely due to the inadequacy of the system and the inferiority of the service.

The increase of 50 per cent. in the number of stations during the first three years of municipal ownership means but little when the insignificant number at the beginning of the period is remembered. Measured by other and fairer tests, the system is found to be even now most inade-

quate. On January 1, 1903, with a population of 525,000, there were only 5,903 telephones in use. Boston, with about the same population, had at the same time at least four times the number, while Manchester, England, with a population of 543,930, and Copenhagen, Denmark, with a population of only 312,859, both under private ownership, had, respectively, over 10,000 and over 17,500.

On the question of profits: With a small system confined to the heart of the city, relatively high rates, very low wages, a light traffic, and no rights-of-way charges, there should be, under good management, a considerable profit. The charter requires, however, that a profit from the industry shall not be depended on, and after exhaustive consideration in 1899 a proposed trifling reduction in rates was refused because of the possible effect on the communal treasury. The amount paid into the treasury is more than offset by the increased expenses of the general administrative offices and lost revenues from the use without charge of government property.

The manager in charge of the system is a very able man. In his official report, referring to Amsterdam, he said: "The high tariff and the irrational and unfair arrangement thereof (meaning flat rates) blocks the way to proper development." He recommended the adoption of message rates. After a year's consideration and debate by the common council and committees thereof, at the end of which there were hardly two men in agreement on any part of the subject, the whole matter was dropped and the conditions were allowed to remain unchanged.

In Rotterdam, with a population of 332,000, there were, at the beginning of this year, but 4,185 telephones in use, while in Cincinnati, with a less population, there were, under private ownership, 14,312.

Between Amsterdam and Rotterdam there are close commercial and social ties, and there is every reason for co-ordination or uniformity in the methods observed. Yet the plant, the methods, the rates, in fact nearly all the features of the business in the two places, are different. The lack of co-ordination, illustrated in these two cities, is a fatal objection to the municipal ownership of telephones. The system in New York city must work in harmony with that in Jersey City or Newark in another state, and with that in Greenwich in still another state. The system in Chicago with those in many other cities and towns in Illinois and Indiana must form a homogeneous whole. New York and all of



the nearby towns and cities, such as Yonkers, Mount Vernon, Newark, Elizabeth, Paterson, and many even more remote from the common centre, are practically one community with one centre of social and business life. Manchester, England, and the cities and towns surrounding it within 35 miles from its centre, all mutually dependent, contain a population greater than that within 35 miles of the Guild Hall in London. To be efficient and satisfactory to the public the telephone systems within such an urban centre, no matter how many municipalities or cities it may contain, should work harmoniously, and this requires that they be under one management. A municipality must confine its operations to its own territory. If it goes beyond that it uses the funds of its citizens for the benefit of others. When it allies itself with other municipalities there must be divided responsibilities and divided powers. In such an event satisfactory ultimate results cannot be expected.

In approaching the *Scandinavian countries* I wish to point out with emphasis that here we may observe the results of private ownership on European soil. The best telephoned cities in Europe are those in the Scandinavian countries. Copenhagen is operated by a private company. Until 1899 it was practically without governmental control. In that year the state assumed control and licensed the company to continue its operations for twenty-five years. With a population of 312,859, Copenhagen, on January 1, 1902, had 17,331 telephones in use. This large development is due to efficient service and reasonable rates, or, in other words, to intelligent, energetic, private enterprise.

Stockholm has the highest development to be found in any European city of equal size. On January 1, 1903, with a population of 300,624, the private system contained 32,563 telephones. San Francisco, with a population of 342,782, had at the same time 39,180. The conditions in Stockholm are sometimes erroneously attributed to state management. The state and the private company have been in active competition since 1890. Through the stress of competition, the state has charged less for its service in Stockholm than in Malmo, with a population about one-fifth that of Stockholm, and, as stated officially, has operated at a loss. Yet in Stockholm its system is only about one-half as large as that of the private company. In the figures for Stockholm already mentioned, I have not included the state system because, to a large extent, its stations are duplicates of those in the private system. The state's rates are flat; those of the company vary with the amount

of use and the facilities provided. Both are relatively low, due to the abnormal conditions resulting from an unusually fierce competition. But from the subscriber's standpoint, because of the double charges incident to two systems in the same area, the rates in many cases are unduly high. In his official report the manager of the Amsterdam municipal system, referring to the state system in Stockholm, says: "The administration is satisfied with paying the working expenses without calculating interest or redemption of capital," and the director general of the state system has declared that the competition, working "in all ways unfavorably," has made the rates unnecessarily low—"quite too cheap even for Swedish circumstances."

In *Great Britain* the history of the telegraph is repeating itself in the history of the telephone. When the telegraph was patented in 1837, the state did not avail itself of the invention, but permitted it to be worked by private enterprise at its own risk until it was developed to a successful point. When the state realized that it was a financial success the properties were acquired, and in 1869 the post-office was given a monopoly of the business. From that time the telegraphs under state management, while remaining very stationary in respect of public utility, have been a financial failure, the amount of the annual deficit frequently exceeding half a million pounds. Mr. Frederick Miller, in "The Evils of State Trading as Illustrated by the Post Office," says:

"The principles upon which the state monopoly is conducted are of anything but a business character, and are such as, if adopted by a private firm or company, would result in speedy ruin. \* \* \* Whether or not it is the intention of the state to take over the telephone, it should not be forgotten that it did its best to obstruct its introduction and prevent the use of that ingenious and novel invention in this country. Although the telephone was not invented and brought to this country till 1877, it was found to be embraced by the wide-meaning terms of the Telegraph Act of 1869. The Post Office declined to use it or allow private enterprise to do so. The state having become a trader in the conveyance of intelligence electrically, was afraid that by allowing private enterprise to use the telephone, the telegraph monopoly would be seriously interfered with. But this dog-in-the-manger policy was of short duration. The public, fully alive to the advantage to be derived by such a cheap and handy means of communication as the telephone would afford, demanded that some concession should be made by the Post Office. This was eventually done, the telephone companies being permitted to establish communication in certain places provided they handed over to the Post Office *one-tenth of the gross receipts*."

Mr. Arthur Chamberlain declared in 1901 that pre-eminence in electrical industry had gone to the United States, because it had been strangled in England by the mischievous activity of the Home Office and the local boards. In the *Nineteenth Century* for February, 1901, Professor J. A. Fleming, D. Sc., F. R. S., says:

"The whole behavior of the Post Office toward private enterprise in telephony during the last twenty years has been marked by inconsistency, ineptitude and want of prevision. \* \* \* Its procedure so far gives no warrant for expecting a far-seeing and successful business policy. \* \* \* The total royalty paid by the National Telephone Company and its predecessors up to the 30th of September, 1900, has been £1,081,490. \* \* \* Hence, the business which the postal-telegraph department does not itself conduct, but only taxes, yields it a handsome profit; the business which it was formed to carry out is conducted at a loss. \* \* \* The most effective method of afflicting any department of applied science with creeping paralysis is to constitute it a government monopoly."

Considering the obstructive policy of the government, the wonder is that private enterprise has been able to accomplish what it has accomplished. London, with a population of about six millions, had at the first of this year 46,928 telephones in use, while Manhattan and The Bronx, with about one-third the population, had 96,364, and Chicago, with a still smaller population, had 60,395. But the London system is in process of transfer to the government under an agreement, the features of which there is not time to discuss. This transfer has been anticipated for several years. With a franchise about to expire, and with no prospect of a renewal, the business has not been developed as under other circumstances it doubtless would have been.

But private enterprise in Great Britain must not be judged by London conditions alone. For example, Glasgow, Liverpool and Manchester rank as to size with Brussels, Amsterdam and Buda-Pest. In Glasgow the municipality has outdone the state in obstructing the company in every possible way. Notwithstanding its many and serious embarrassments, private enterprise has achieved in these British cities much better results than public ownership with no embarrassments has achieved in the continental cities, as shown by the number of telephones in use in each at the beginning of this year, viz.: Glasgow, 9,100; Liverpool, 10,955; Manchester, 10,045; Brussels, 6,267; Amsterdam, 5,903; Buda-Pest, 6,671. Although Paris shows a higher per capita development than London, which to some extent should be expected even under the same management because of differences in size and general character, the development in French provincial cities falls far short of that in British provincial cities, as indicated by figures already mentioned.

Respecting the operation of the trunk lines by the state, Mr. A. R. Bennett had this to say in a letter to the *Electrical Times* of January 9, 1902:

"I wish I could close by discerning some slight prospect of an improvement in the trunk line service in 1902. Our trunk rates are the dearest in Europe, and the

number of trunk lines joining the various towns is quite insufficient to insure a prompt service. But sanguine man as I am sometimes supposed to be, I am not sanguine enough for that."

In respect of municipal ownership in Great Britain, the points of interest are the Island of Guernsey and the cities of Glasgow and Tunbridge Wells. The actual experiments thus far have been confined to these places. The Island of Guernsey is only eight miles long and four miles wide. Its population is 35,000 and its capital is centrally located. These facts make for short lines and a cheap system. The wages, rents and other operating charges, as shown by the official accounts, are extremely low, and the whole affair is on such a small scale and operated in such a manner as to make any results obtained worthless in an attempt to determine what should be accomplished elsewhere, especially in a city of even moderate size. After analyzing the Guernsey accounts and declaring that if certain sums properly chargeable were taken into account, the profit per line for 1901, of about 66 cents, would probably be swallowed up ten times over, representatives of the Tunbridge Wells Ratepayers' League say:

"The simple truth is that Guernsey is running the business on a system that would not be tolerated elsewhere. A snug little family arrangement seems to obtain that is more suggestive of Florodora, or Barataria, than of 'Business Principles' and the Twentieth Century."

The Guernsey enterprise is much like that of a small co-operative concern in an isolated village, where much of the labor and material are contributed and do not enter into the accounts. Any results claimed for such an enterprise must necessarily be of little or no value in the consideration of a general proposition.

In Glasgow an official inquiry showed that the company was unreasonably obstructed by the municipality and that although its rates were fair the service was inefficient because the municipality would not permit it to put its plant in proper condition. The municipality itself desired to undertake the business, and when the Act of 1899 was passed, obtained a license from the Post-office. It began by installing an antiquated and practically obsolete call-wire system, because it said the subscribers were used to such a system. The official accounts for the first nine months' working showed that the construction estimates had been exceeded almost one hundred per cent., and that on a capital outlay of £192,693 there was a profit of £398, without a penny being set aside for depreciation. Attempts are made to improve the aspect of the situation by excluding capital invested in surplus or spare facilities,

by claiming that because of the newness of the plant it is not necessary to provide a reserve for depreciation, and even by crediting to the period under consideration advance payments for service to be subsequently rendered. It is impossible to believe that an intelligent public will give its assent to any of these propositions.

In Tunbridge Wells the construction estimates were exceeded to such an extent, the receipts were so disappointing, and the expenses so surprising, that the plant was sold practically at cost, and the municipality retired from the business. In urging the post master general to ratify the sale, the mayor of Tunbridge Wells declared the undertaking to be a hopeless failure. Much has been said by the different parties involved; the engineer has criticised the managers, and the managers have criticised the engineer. Whoever was at fault, it is certain that the undertaking failed. In a letter to the town clerk, dated December 2, 1902, Mr. A. R. Bennett, the engineer in charge of the plant, on whose estimates it was built, said:

"Orders for work and material have been given without reference to me; much work has been carried on which was never included in any estimate, and which was totally unnecessary. I have been kept in ignorance of the financial position, and all control of the work has been taken out of my hands. \* \* \* The substitution of small underground cables for the overhead lines, which were originally estimated for, for which change of plan I was in no way responsible, and the wayleave difficulties, which led to much of the work being reconstructed several times over, also caused greatly increased expenditures. In none of these matters had I a controlling voice. \* \* \* I would also remind you that I have complained many times of the extravagant scale of working expenses. The undertaking, in spite of my frequent protests, has been managed with a reckless disregard to financial results."

#### Conditions in America.

In commenting on European conditions I have mentioned only the countries which are best developed telephonically. The conditions in other countries, if time would permit them to be mentioned, would strengthen the contention for the superiority of private ownership. I have mentioned American conditions only incidentally. I should like to tell you of the wonderful development that has been achieved in this country, of the efficient service and the relatively low rates. The message rate plan has been adopted, in some form, in all of our principal cities. There has been a great decrease in average rates, and the rapid growth has been unparalleled. Two telephone systems in one area cannot permanently endure. The public can be satisfactorily served only by a monopoly. A monopoly can never hope to fully satisfy all its customers, however sincerely and conscientiously the management may try to do its full duty to the public.

In the past, however, much of whatever dissatisfaction may have existed has been due to misinformation respecting conditions in other countries, and the profits of the business in this country. Permit me to cite two suggestive instances. The statement used to be made frequently, and is still made occasionally, that the company operating in New York city had been shown by an official investigation to have earned 147 per cent in one year, and 474 per cent. in six years, on its invested capital. The official report from which these astounding figures were said to have been taken contained no such figures and nothing from which they could be fairly deduced. On the contrary, the report showed that, for the period of eight years covered by the investigation, after reasonable allowances for depreciation were made, the net earnings were less than ten per cent. per year on the capital actually invested.

An officer of the company operating in Washington was once asked by a Congressional investigating committee what he thought the profits should be. He answered 35 per cent., meaning thereby not that interest at 35 per cent. on the capital invested should be earned, but that the operating expenses should take but 65 per cent. of the gross earnings and leave 35 per cent. (which bookkeepers generally call profits) to meet depreciation, bad accounts, contingencies and interest. Although his statement as a whole was very clear, it was given publicity only in part, and in such a way as to give the impression that the company had admitted through one of its officers that it was extorting from the public 35 per cent. per year for the use of money.

President Hadley, in *Railroad Transportation*, calls attention to a difference between American and European ideas respecting liberty; Dr. Shaw, in *Municipal Government in Europe*, to some fundamental differences respecting the franchise; and Professor Ely, in *The Coming City*, to marked differences in the method of selecting municipal officers. All of these differences—I regret that time will not permit me to speak of them at length—are such that America could not safely rely on European experience in municipal trading, even if that experience were most satisfactory. But even if there were no such differences, European experience has not been such as to tempt America to try the doubtful experiment of municipal ownership of the telephone. The telephone was invented here, and here, under private enterprise, it has attained its largest measure of usefulness.



## REASONS FOR PUBLIC OWNERSHIP OF THE TELEPHONE.

BY FRANK PARSONS.

Public ownership is higher in the scale of civilization than ownership by a private corporation. The history of civilization is the history of the development of co-operation in ever widening circles till at last the all inclusive circle of public ownership is reached. At first defense was a private affair. Each man took care of himself. But as common sense has developed, men have united for security in larger and larger groups—tribes, states and nations, making defense a public business. It was the same with the administration of justice and all the other functions of government, at first private, but becoming public as civilization grew. Even New York has recently decided to have public ownership of her administration, though the practical transfer from the political syndicate formerly in control has not yet been fully accomplished. Education, fire service, water supply, roads, parks, communication of intelligence, all sorts of public utilities or business in which the people have a strong interest, have passed through the same stages of evolution, private at first and public later as civilization has risen to higher levels, and the union of all for the common interest in sphere after sphere of activity has become possible. The private corporation is itself a step in the process of crystallization, which will not be complete in respect to any public utility till the little corporation melts into the big one, the partial union into the complete union of all concerned. Public ownership is simply a further step in the progress towards the complete organization of industry of which the corporations are partial and undeveloped forms—an organization which I hope may become complete through the development and co-ordination of two great movements: (1) the public ownership of monopolies and some other public utilities such as education, fire service, etc., the true diffusion and development of which are too important to be left to private enterprise; and (2) the growth of voluntary co-operation in manufactures,

commerce and agriculture, with federation of the co-operative groups and the co-ordination of the whole with the united public utilities.

I have begun with this glance at the relations of public ownership to the movement of civilization because I believe that altogether too much attention is given to the purely financial side of the question. Hours, days, weeks and years of discussion are given to the claim that public ownership saves money for the people and the counter claim that private management is the more efficient to the utter neglect of far more important considerations. It is not difficult to show that, under similar conditions otherwise than as to management, public ownership is economically superior to ownership by a private corporation, but even if it were not so, even if the contrary could be shown, it would be of small weight compared with the other elements of the case—elements as much more important than money, as justice, political purity, manhood, mind, character, soul, diffusion of benefit and true relations among men, are more important than the amount of silk, cotton and canned goods manufactured, the tons of copper and iron that are mined, or the bushels of wheat and potatoes raised. The fault of our age is the worship of gold and its representatives in the world of merchandise. This fault has taken possession of economic discussion. It is of prime importance that the commercial astigmatism of the time should be corrected so that social questions may be viewed in their true proportions and relations.

The fundamental test of any institution, method or service must be its effect upon the public good, its relation to morals, manhood, government, industry, civilization and progress; and in applying this vital test the principal emphasis must be placed, not upon financial results, but upon human results, not on money, but on manhood. Final values—real values—must be measured in terms of life and progress, not in terms of dollars and cents. Dollars and cents are important, of course, but life, liberty, justice, virtue and intelligence are infinitely more important. Material wealth is an excellent thing rightly obtained and properly used, but it is not an end in itself, it is only one of the raw materials of civilization. Justice, character and human development, happy homes and noble lives are the real ends for which telephones and street railways and all other institutions, industrial, political or social, exist, and only so far as they conduce to those ends is their existence justified.

Let us apply both the financial and the human tests to public ownership and to corporation ownership; first noting, however, that care must be taken in this discussion to distinguish true public ownership from the fictitious or adulterated article. To put a utility in the hands of the government is not necessarily to establish public ownership of it, for the government itself may be a private monopoly, and if so anything you put in its hands may be a private monopoly. Public ownership of the government is essential to any real public ownership of anything else. Many mistakes arise from neglect of this clear principle. We are told for example that public ownership of the gas works in Philadelphia was a failure—that the works were allowed to get out of repair and had to be leased. But the truth is that Philadelphia did not have public ownership of the gas works any more than Russia has public ownership of her railways. The essence of ownership is control, and the Philadelphia gas works were controlled by the councils and the councils were controlled by the corporations and so the works were purposely allowed to get out of repair against the protests of the superintendent, in order to give the corporation influences in councils a plausible excuse to take the whole outfit including the gas revenues as well as the works into their tender keeping. I would not advocate public ownership of any franchise utility for Philadelphia—even her water is mud as well as her politics—until she comes somewhere near learning to control her own government—so near as to base a reasonable hope that the lift of municipal ownership will land her in self government instead of the lack of self government dragging municipal ownership down into the slums of partisan and private politics. A city or town is fit for public ownership of important public utilities only in so far as it has reached the stage of civilization in which the government may become really and truly public property administered honestly and efficiently in the public interest. When that stage is reached real public ownership of the telephone and other utilities becomes possible and is desirable for the following reasons:

#### **Advantages of Municipal Ownership.**

The fundamental aim and purpose of public ownership is superior to that of corporate ownership. A normal public plant aims at service, while a normal private corporation aims at private profit. The public

telephone managements of Europe have tried to bring the service within reach of the whole people. The Bell monopoly has confined its attention almost entirely to populous centers where large profits were to be realized, and only lately as the patents ran out, independent and co-operative companies have established exchanges in smaller places.

Here in New York years ago it was shown that the telephones were yielding an average of 80 per cent. profit a year on the investment of the company and part of the time nearly 150 per cent., yet the company kept raising the rates, first \$60 a year, then \$150, then \$180. The present rate for direct unlimited service is \$240, with measured service rates to match—from 600 calls for \$75 and 8 cents for each additional call, to 4,500 calls for \$228 and 5 cents for each added call. About two-thirds of the receipts, the Independent experts estimate, are profit. I have again and again received estimates from telephone experts of the highest character, some of them showing in detail every item of construction and operation with its cost in New York, resulting in the conclusion that \$85 to \$100 would be sufficient rates in Manhattan for direct unlimited service. Yet even the Independents, who have cut Bell rates in half in many places and would do so in New York if they could get a chance, are not actuated and do not claim to be actuated by any anxiety to offer the service to the public at or near cost. Some time ago in talking with an Independent manager, I spoke of the \$85 to \$100 estimates and asked his opinion of them. He said: "What's the use of doing it for that when you can get more." The simple fact is that the current ethics of private business differs from the ethics of public business. The ethics of good public business is to make the plant serve the public, regarding profit as a secondary consideration. The ethics of good private corporation business is to get all you can and keep all you get.

#### **No Watered Capital.**

Public ownership means fair capitalization which is essential to just dealing between one industry and another, and in the long run is essential to business safety and sound economy. A public plant does not water or inflate its capital. A private monopoly usually waters its inanimate as well as its animate stock, and is often puffed out with wind, or gasses generated by decayed or decomposing capital not prop-

erly eliminated from the system. The tendency to flatulence and dropsy is in the family.

The telephone monopolies are not quite so well watered as the telegraph or the street railways, but they are pretty juicy, nevertheless. The capitalization in Washington has been ascertained by judicial investigation to be more than double actual values. Here in New York the capitalization is estimated by the Independents to be a good deal more than twice the needful expenditure, *excluding legislative expenses*—an item which cannot be estimated and which ought not to exist and would not exist under public ownership. In Philadelphia, as I am informed by high authority, the Bell capitalization is nearly three times what the plant could be duplicated for as a going concern. The capitalization in Boston is also considerably in excess of real values and probably the same thing is true in other cities, for the Bell companies are generally run on quite similar lines of policy.

Even when a private monopoly does not use the hydrant, it usually counts in its present capitalization all the dead capital put into the plant from the start, although it may have been worn out and replaced years ago. A manufacturer or any one else in the competitive field has to write off his depreciation, but a monopoly expects the public to keep on paying dividends on its traditions and account books, as though the life of capital were eternal. "Men may come and men may go, but I go on forever" is the song of capital when a monopolistic corporation writes the music. Private monopoly does not believe in burying its dead capital, but keeps it on the register as a basis for taxation of the people. Monopoly's census of capital includes as present population all the inhabitants who have ever lived in the building since it was put up.

#### Rates Lowered.

Public ownership makes lower rates than corporate ownership in the same country and under similar conditions. In France when the government took the telephone in 1889 rates were reduced from \$120 to \$80 in Paris, and from \$80 to \$40 elsewhere except in Lyons. Amsterdam got a franchise in 1896 and changed from private to public telephones, reducing the rates from \$47 to \$36, improved the service and doubled the number of telephone users. When the government entered the field in Stockholm it reduced the rates from 22 and 28 to 16½ and 22, put in metallic circuit against single wires, underground

against overhead wherever possible, direct connection with the long distance service and free communication within a radius of 43 miles. The company met the competition in excellent shape, but the public system gave the initiative in reduction of rates and improvement of service. A public plant in London has now reduced the rate from \$100 to \$85. In Glasgow municipal ownership has cut charges from \$50 to \$27. In the public exchange of Berlin the rates for direct line unlimited service are \$16 to \$45 as against \$100 in the private system of London, \$240 in New York, \$96 to \$120 in Washington, \$60 to \$150 in Cincinnati, \$78 to \$120 in Providence. The low rates in public systems as compared with those of private companies is just what would be expected by any one acquainted with the two systems of management. The rate-level that yields the greatest profit is higher than the rate-level that secures the widest service without deficit, and as the private company aims at dividends while the public plant aims at service, the latter naturally makes the lowest rates.

In this country we have had but one small case of public ownership of the telephone so far as I know. In 1894 the Department of the Interior in Washington used the Bell telephone at a total cost of \$75 per telephone. The department asked for a reduction, but the Bell folks said they could not afford to reduce rates. So in 1895 the government put in its own telephones and the cost of the service proved to be but \$10.25 a year—interest, depreciation and all. After a few years the Bell concluded to give the department reasonable rates (\$18 to \$24), down close to the cost as proved by the government experiment (all the way down, perhaps, considering the distance facilities of the Bell service), and as the government wanted the long-distance service and the department plant was not as well constructed as was desirable, nor first-class in operation anyway, the department went back to the Bell telephones to get the wider and better service.

Co-operative ownership, even when not of the all-inclusive kind we call public ownership, is able to lower the cost of telephone service materially. At Grand Rapids, Wisconsin, the Bell Company was charging \$36 for residence and \$48 for business telephones and refused to lower the rates. A co-operative company was formed and the cost fell to \$9 a year for a residence telephone and \$24 for a business place. The company has put in metallic circuit throughout and is rendering excellent service. A letter from the general manager dated February



12, 1903, says that each subscriber has an individual metallic circuit, and the rates are \$1 a month residence and \$2.25 business. Each subscriber is entitled to one \$50 share of stock for each telephone he rents, and no stock is sold except to renters and only one share per telephone. A monthly dividend of one per cent. is paid on each share, making the actual rates to the co-operators \$6 a year residence and \$21 business, to which should be added \$3 a year for interest. There are 434 exchange lines and the average cost of operation is less than \$8 per telephone per year. "The general public opinion here regarding telephone service is such that the Bell people have an exchange of 7 telephones and 4 of these are outside of the city limits." The Bell company said they could not afford to reduce their charges, but the people of Grand Rapids are now receiving telephone service at a third of the former rates.

Bell rates are too high, as the independent companies have shown. The following table exhibits some of the reductions made by the independents in charges for direct lines and unlimited service:

	BELL RATES BEFORE THE INDEPENDENTS CAME IN.		RATES MADE BY THE INDEPENDENTS.	
	Business Place.	Residence.	Business Place.	Residence.
Philadelphia .....	<b>\$160</b>	<b>\$130</b>	<b>\$80</b>	<b>\$48</b>
St. Louis.....	<b>120</b>	60	<b>60</b>	36
Indianapolis.....	<b>72</b>	48	<b>40</b>	24
Rochester.....	<b>125</b>	64	<b>48</b>	24
Averages.....	<b>120</b>	75	<b>57</b>	33

A letter from the secretary and treasurer of the Rochester Independent Telephone Company, February 12, 1903, says they have 4,300 lines, are paying 4 per cent. dividends (on a considerably inflated capitalization, though he didn't say that) and the company has a handsome surplus. "Without exception, so far as I know," says the secretary, "the independent exchanges when provided with sufficient capital and properly built have been successful."

In Philadelphia the Keystone Company began putting in lines in opposition to the Bell a couple of years ago and now have 5,600 lines in operation and 6,000 orders for new lines. The service is direct metallic, unlimited, and the rates \$48 for a residence and \$80 for a

business place, against the former Bell rates of \$130 and \$160, a reduction of more than half. Yet the general manager of the Keystone assured me last Saturday that the company is entirely satisfied with its profits on those rates, and would be glad to operate all the lines in the city at the same rates. The Bell has about 14,000 exchange lines and has considerably reduced its rates for measured service. A business man has to have both the Keystone and Bell services. The usual plan is to take the cheapest Bell measured service, \$48, plus 5 cents a call beyond 600, and an \$80 unlimited Keystone line and even then the total cost for an ordinary firm is less than if it paid Bell measured rates for the whole, the present arrangement being equivalent in cost to the Bell charge for 2,200 calls, which is not enough for the ordinary business house.

In New York, as I have said, \$85 to \$100 would probably be sufficient charges instead of the present rate, \$240, with an average for measured service and all of about \$185 per exchange line. One telephone expert thoroughly familiar with the New York situation says he would lay out a system for 400,000 phones in Greater New York, put a telephone in every business place and dwelling where they would receive it and make no charge but 2 cents for each outward call. This would probably produce about \$40 average receipts per phone per year, or, with the pay station receipts, somewhere between \$40 and \$50 per phone, which he thinks would be sufficient, in a well-built system with a central clearing house connected with each exchange in place of a complex net work of trunks from each exchange to all the others.

The cost of operation and maintenance in small places with three or four hundred subscribers is \$8 or \$10 per station. In cities of two to five hundred thousand inhabitants, like Indianapolis, Rochester, Washington and Cleveland, the cost of operation and maintenance is \$18, \$20 and \$24 per line. Managers of large and successful experience say that even in giant telephone systems such as those required in Boston, Philadelphia and Chicago, if properly laid out and constructed, the cost of operation and maintenance should not exceed \$35.

The expense is greater in a large plant than in a small one. Where each subscriber may call for connection with any one of 100,000 others, the service costs more per subscriber than in a small city where a subscriber has only 1,000 names to select from. The cost of switchboards rises in geometric ratio as the exchange increases in size. But there is

excellent reason, nevertheless, to believe that too much stress is laid by the Bell people on the argument of increasing cost. The expense per unit rises considerably as the system grows from two or three thousand to fifteen or twenty thousand, but once having reached the limit of expense for two exchanges of a system, the addition of other exchanges in the same city should only very slightly increase the cost per unit in a well planned system. The investment per line runs from \$40 or \$50 in small places to \$100 and \$150 in ordinary cities of the third class, \$200 in cities of the second class, like Philadelphia and Boston, and possibly \$250 to \$300 in Manhattan, though the latter is only estimate, and the estimates vary from \$150 to \$300 per line, not including legislative investment nor the subways which in New York are owned by a separate company, interlocked, however, it is said, in some way with Bell interests, so that the Independents can not get the duct routes nor rates they think should reasonably be accorded them.

The fair cost of operation and maintenance in Manhattan is estimated at \$40 to \$60. On the outside estimate, therefore, with 5 per cent. for depreciation and 5 per cent. for interest on the highest estimate for capital, an average of \$90 would be sufficient, and 5 per cent. put in a sinking fund and compounded year after year would more than cover depreciation in a well kept plant.

The evidence is overwhelming that Bell rates are much too high, yet attempts to reduce them by legislative regulation have failed and are likely to fail because of the influence of the companies in legislative bodies, the obstacles of over-capitalization and the difficulty of discovering and disentangling the reasonable cost from their ingenious books of mystery called account books. Competition will reduce rates, but it is wasteful to duplicate the wires, and very inconvenient to have the service divided. And if a merger or consolidation occurs, as is very likely to be the case sooner or later, the public will be made to pay round dividends on two capitalizations, both most likely largely watered. Co-operative ownership is an excellent remedy, but our people as yet do not seem to take much to that form of relief, while municipal ownership has a vigorous public sentiment in its support and appears therefore to be the only practicable, economical and adequate method of securing good service at reasonable rates.

**Municipal Operation Gives Better Service.**

Greater facilities for varied use of the telephone and better co-ordination of services are secured by public than by private ownership. The public systems of Europe thoroughly co-ordinate the telephone service with the telegraph and the post.\* In France and Belgium for example, telephone subscribers can telephone their telegrams free. In England, also, you can send telegrams free over the telephone, and for 6 cents you can telephone a message to be written down at the other end and sent out by messenger like a telegram. Messages are telephoned to a subscriber free. In Germany it costs 2 cents plus  $\frac{1}{5}$  of a cent for each word to telephone a message, telephone a telegram or telephone a letter. You go to your telephone and tell the clerk at the other end what you want to say in your message or letter and he writes it down and sends it by messenger or posts it for you.

The defenders of private ownership are fond of saying that it secures greater efficiency because a man will give more attention and energy to his own business than to the public business. It is true that as a rule in the present stage of human development a man will do better by his own business than the public's, but that does not touch the issue. The argument applies to a business small enough for the owner to manage in person, but it does not apply to a corporation the owners of which have to employ agents to manage their affairs just as the public does. There is no reason why the same men who manage a telephone exchange for a Bell corporation should not manage it with equal honesty and efficiency for the larger corporation we call the city. It is true that the people's business is sometimes not well managed, but that is where the community is not yet up to the level of real public ownership and the people's business is managed more or less as the private property of a gang of politicians. Throughout this country and Europe in many municipalities that have evolved to the public ownership stage, you will find public enterprises that are managed quite as well as the best private companies in the same line. The public telephone exchanges of Sweden and Switzerland are admittedly among the best in the world. My own observation is that the better public telephone systems of Europe are infinitely superior to the private systems in England, quite equal to our own service, and, considering the additional service rendered, they are ahead of us.

\* For a full description, see my chapter on the Telephone in *Municipal Monopolies*, edited by Prof. E. W. Bemis.

## Social Advantages.

A larger use of the telephone is secured as a rule under public ownership than under corporation ownership in the same locality. This results from lower rates, ampler facilities, fuller co-ordination and a definite aim at extension of the service. Public ownership has very greatly increased the use in Amsterdam, Rotterdam, Stockholm, Paris, London, Glasgow, etc. A comparison of telephone data for different places shows the same advantage of public ownership over private where other causes do not offset its effects. The last eight words are very important for the mixture of causes in telephone development makes fallacious comparisons very easy. Wealth and its diffusion, energy, business push, and other elements of civilization have quite as much to do with telephone development as the character of the ownership.

Mr. Bethell, general superintendent of the New York Telephone Company, has made various comparisons as to wages, service and telephone development in Europe and America, with the inference that the differences noted were due to private management here as against public management there. Such comparisons and inferences are wholly unsound and unwarranted. *The fair comparison is between public and private ownership in the same country, or, better still, in the same city, under similar conditions except as to ownership.* If systems in different countries are compared, the general conditions must be shown to be similar or else they must be shown to be superior in the country having the inferior telephone development before any inference as to the management can be drawn from the number of telephones per thousand inhabitants. If the inferior telephone development is in the inferior country or city, the low development may be due to difference of race, nationality, commercial advancement or general civilization. America is superior to Europe in respect to many industries and services that are in private hands on both sides of the sea. In my experience of many months of study and travel throughout the greater part of Europe, the superiority of America is nowhere more remarkable than when our best telephone and street railway systems are compared with the private corporation trams and exchanges in Great Britain. Mr. Bethell has compared New York with backward Paris, refraining from any comparison of New York with still more backward (and till just now private) London, but com-

paring the business *core* of New York (Manhattan and Bronx) with the *whole* of Berlin, instead of comparing the whole of New York with the whole of Berlin, a comparison which would not have been comfortable because it shows a higher telephone development in Berlin.

By the data of 1901, the latest I have in sufficient completeness, the heart of New York (Manhattan and Bronx) claimed 26 telephones per thousand inhabitants, New York as a whole 20, Boston 42, San Francisco 62, Cleveland 58, Indianapolis 47, Richmond 44, Philadelphia 16, Washington 14, Brooklyn 11, and London 7; all under private corporations, while under public management Zurich had 40, Berlin 25, Paris 13, Rotterdam 10, Trondhjem 40, and Stockholm, with both public and private exchanges, 69, leading the world in telephone development. Now it proves nothing in respect to the ownership and management to state, as our telephone people have done, that the business district in the heart of New York has twice as many 'phones per thousand people as the average throughout the whole of Paris, any more than the private management in Cleveland, Indianapolis, Richmond, Boston and San Francisco is proved to be better than that in New York by the fact that they have two or three times as many telephones as New York per unit of population. New York has three times the telephone development of London, nearly twice that of Brooklyn, while Larchmont has nine times the development of New York, all under private ownership. Such differences prove nothing as to the management, being due, in all probability, to other factors in the problem.

When, however, we compare two cities substantially on the same level except as to the management of the telephone, or find a city which on general principles should be in advance of another really falling below it, some inference may justly be drawn. For example, London's commercial superiority to Paris or Berlin would lead us to expect a greater use of the telephone in the English city, whereas its corporation telephones numbered only 7 per thousand against the 13 public telephones of Paris, and the 25 public telephones of Berlin. So we might expect that with equally good management Washington, Brooklyn and Philadelphia would have a higher development than Zurich, Trondhjem, Berlin or Stockholm, and the fact that such cities in Europe suggests that our private plants may not be as well managed as their



public systems in respect to rates and other elements affecting diffusion of the service.

The fact is that our telephone companies put their capital where it will bring the most dividends and charge all they can get, letting the out districts and the poor people go without the service. While the public systems of Europe, Australia and New Zealand make every reasonable effort to bring the service within reach of the whole people and in some of them, Sweden and Switzerland, for example, there are 20 to 50 per cent. more telephones per thousand inhabitants than in the United States, although we have a larger proportion of urban population, and before the co-operative and independent competing companies got to work here our development was only half that of the best public systems whereas, in view of our general business energy and wide-awake advancement, we ought to lead the world in telephone development.

#### Disposition of Profits.

The profits of the business under public ownership go into the public treasury instead of the pockets of a few monopolists. Public ownership therefore favors the diffusion of wealth, which is all-important, and is opposed to wealth-congestion, which is the great danger of our time. In an investigation in New York some years ago, the testimony of the officers of the Metropolitan Telephone Company showed that the company had made net profits of 145 per cent. and 147 per cent. a year in some years and 474 per cent. in six years, realizing \$2,843,454 net in six years on an original cash investment of \$600,000. It does not take long to make industrial aristocrats at that rate; the unearned increment piles up very fast when you have a good monopoly.

We have a provision in our Constitution against titles of nobility; nobody must be called duke, or prince, or marquis. But we leave our telephones, telegraphs, railroads and other monopolies free to manufacture commercial dukes and industrial princes more powerful than many of the old world aristocracy. The name is but the shadow, the overgrown wealth and power constitute the substance of aristocracy.

#### Other Advantages.

Public ownership is good for labor. Wages are higher and salaries lower, and this again helps the vital matter of fair diffusion of wealth.

The statements I received from officials and telephone employees in various countries of Europe show that the officers get less and the "hello girls" and telephone boys more than in similar private employments. In England, France, Holland, Denmark and Sweden, wherever a change from private to public ownership has been made, the increased pay of the common workers is an ordinary characteristic of the change. Mr. Bethell tells us that telephone wages are low in the public exchanges of Europe. As compared with our wage scale that is true in many cases, but as compared with the European wage scale it is not so. Their telephone girls get better wages relatively than ours, and sometimes absolutely more. With us the wages average \$4 and \$5 a week in cities like Cleveland and Indianapolis. In larger cities the girls receive from \$4 to \$8 ordinarily; some of the better operators in New York, however, I am told, getting \$12 and even \$15 a week. In the London public system, I was informed, the girls were paid \$17, which is not only more than the National Company's exchange in London pays, but is more than telephone girls receive in our cities as a rule.

A private corporation buys labor at competitive prices. A public system mingles considerations of justice and public policy with the principles of commercialism and lifts the wages of labor above the competitive level, though not always as much above it as some of us think they should be.

An absolute saving or lowering of cost will result from public ownership as well as a reduction of charges:\*

Public ownership has no lobby expenses or legislative fund to provide for; nor any dividends on watered stock to pay; nor overgrown salaries or monopolistic profits; nor litigation expenses and lawyers' fees; it saves on interest and insurance; it gains through the co-ordination of services; and through the civic interest of the people in their own plant, and the higher efficiency of better paid and more contented labor; it would save the cost of endless investigations into the secrets of private monopoly; it would diminish the cost of legislation, for a large part of the time and attention of our legislators and councilmen is given to the private monopolies.

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\* For fuller development of this and some other reasons for public ownership, see my testimony before the U. S. Industrial Commission, Vol. II. of their Report on Transportation, and chapters on this subject in *The City for the People*.

**Progressiveness.**

It is said that public ownership is less progressive than private ownership. This is true when we compare ordinary public management with the best private management in a brisk competitive field, or when we compare a public plant in an unprogressive country or city with a private plant in a progressive place or a sham public plant in a machine or boss ruled city with a fairly good corporation. But if we compare real public ownership with private monopoly in the same field and the same country, the scale tips the other way.

The public exchanges in Holland, France and England, though less progressive than the best exchanges here, have nevertheless proved far more progressive than the private exchanges in the same localities, and the public system in Stockholm not only led the private Stockholm plant in progressiveness, but has few if any rivals in America.

In this country telephone inventors find themselves barred out of our cities by the existing monopolies. They resist improvements that call for sweeping changes in their methods and investments, and they don't want any new company to come in. They do not want to change themselves and they don't want competition. Thus, as a rule, unless the new concern can bring more pressure to bear on the government than the old one, the new one has to stay out.

Just now there are two inventions in the telephone world that promise material reductions in the cost of service in our cities if the inventors can obtain the needful franchises. I refer to the Rogers system and the Faller automatic, which have had to go to Canadian cities to find a welcome. The Rogers plan appears to get results as good as the best, with wires one-tenth of the cost of those now in use, and makes other important savings; while the Faller automatic switchboard does away with the necessity of telephone operators, making the connection between any two subscribers in four seconds by automatic mechanism, the smoothness and certainty of which it is a delight to behold. The cost of the automatic is only \$20 per drop (or subscriber's line) even in a very large system as against \$25 to \$50 per drop for the switchboards now in use. Mr. Rogers expects soon to have the new system in operation in Hamilton, Ont. (a place of 60,000 people), and is trying to secure a franchise in Toronto (250,000), where his proposition is favored by the mayor. The Bell rates in both places are \$25 and \$45, or \$30 and \$50 if you have a long distance instrument. Mr.

Rogers offers rates of \$10 and \$15 per line per year in Hamilton, where the exchange may number 3,000 phones, and \$12 and \$18 per line in Toronto, direct unlimited service in both cases. The investment required is \$100 per line, \$20 of which goes for the inventions, \$18 for the trunks to connect exchanges, and \$62 per line for the local construction and equipment. The Rogers contracts contain a clause allowing the city to take over the plant at its face value, \$100 per unit, at any time after three years. The fact that they are having so much difficulty in getting a chance in our cities proves that some of the poor little half civilized places in the old world are by no means alone in exhibiting symptoms of not being overburdened with anxiety for progress.

#### Effect Upon Public Good.

We have seen that public ownership is approved by the financial tests, and that it secures a wider use of the telephone than corporate ownership under the same conditions of race, etc., a better co-ordination with other services and a fairer treatment of labor; and we shall find it equally endorsed by the other tests relating to justice, good government, civic patriotism, character and development.

Good government will be favored by public ownership of the telephone. It is matter of common knowledge that the private monopolies, telephone, telegraph, street railways, gas and electric light, etc., exercise undue influence over state and city governments in order to get what they want, and keep from getting what they do not want.

Professor Ely says: "Our terrible corruption in cities dates from the rise of private corporations in control of natural monopolies, and when we abolish them we do away with the chief cause of corruption." Dr. Albert Shaw says: "The pressure that would be brought to bear on the government to produce corruption under municipal ownership of monopolies would be incomparably less than the pressure now brought to bear by the corporations." Governor Pingree said: "The corporations are responsible for nearly all the thieving and hoodling from which our cities suffer."

#### The Patronage.

It is true that the patronage would be increased and public officials would be tempted to make appointments in line with their private or party interests, but they do that now, there being a regular system in

many cities of recommendations by aldermen, friends and adherents to positions in the employ of the franchise monopolies. Under real public ownership with good civil service regulations, the power of public officials to work for their selfish ends would be less than it is now. And, even with imperfect public ownership in any reasonably civilized community the forces tending to restrain abuse of official power would be augmented in greater ratio than the temptation to abuse. At present a large proportion of the richest and most influential men in the community—managers and stockholders of the telephone companies and other monopolies—are interested in the election of men who are willing to use their offices for private purposes instead of for the public good. They want men who will work for the monopolies instead of for the people, and the same men are likely to abuse the patronage, of course. But make the great monopolies public, and these same rich and influential men become intensely interested in the election of good men, who will honestly administer these great properties that affect their lives so intimately. Abolish private monopoly, and the rich will have nothing to gain and everything to lose by bad government—no franchises to get from “boodle aldermen,” but inefficient telephones, poor gas, blinking electric lights, etc., and accentuated taxes by abuse of patronage. They will therefore join with the common people in the demand for honest and efficient civil service and for the nomination and election of competent and reliable men. As part owners in private telephones, etc., their financial interests are opposed to good government, but as part owners in public telephones, etc., their financial interests would demand good government.

Few matters in connection with this subject are more important than this change of interest and civic relation of men of wealth and power. To annihilate abuse of patronage we must adopt a thorough system of civil service, based on merit and efficiency, and in a reasonably civilized community nothing can more surely bring this to pass than a great increase in the weight and importance of public business. Not only will the public ownership of monopolies compel the rich to stand with the poor for good government, but the people in general will be stimulated to new effort for better administration. They will say, “With these great properties in our hands the public business has become far too important to trust to rascals. We’ll elect the best men we’ve got to manage these great interests.” It has worked that way

across the sea, the increase of municipal ownership being recognized as one of the chief influences in purifying the government in Birmingham and other English cities, and the logic of the situation clearly indicates that public ownership must operate in the direction of political purity.

The Detroit electric light plant, as shown by Mr. Ingram before this convention, is an excellent illustration, not only of a successful public enterprise in a city where we know the government is by no means angelic, but of the tendency of such an enterprise to purify politics. Detroit appears to have reached the stage in which she can feel the lift of municipal ownership, instead of dragging it into the mire.

True public ownership removes the antagonism of interest between the owners and the public, which is the tap root of the evils of private monopoly, and with the union come better relationships and higher ideals among men. Of the four great groups of human relations, conflict, mastery, partnership and devotion, corporation ownership chiefly illustrates the low relations of conflict and mastery, while public and co-operative ownership introduce the higher relation of partnership, which with the growth of public spirit may be transformed into devotion, the highest relation of all. Every change from private to public ownership tends to replace the commercial ideals of private profit and industrial conquest with the nobler ideal of service. The most important of all the benefits of true public ownership is its character product, its tendency to develop a fuller civic patriotism, a better citizenship and a higher type of manhood.

The movement of events in the telephone world is strongly in the direction of public ownership. In France, Switzerland, Austria, Holland, Denmark, Sweden, England and Australia the movement from private to public telephones has vigorously manifested itself. Some countries made the telephone public from the start and have kept it so. With the single exception of Tunbridge Wells, in England, where the transfer was notoriously effected against the wishes of the people through trickery and undue corporate influence in the council, no city or country, so far as I know, has changed from public to private ownership of a national or municipal telephone exchange. The trend of events is toward the public system. It is the survival of the fittest and the fittest in this case is the best.





## MUNICIPAL TELEPHONY IN GREAT BRITAIN.

BY A. R. BENNETT.

Municipal telephony in Great Britain owes its origin to the control over telegraphs and telephones given by Parliament to the Post Office. This control, which dates from the very commencement of telephony, has been exercised in a manner which has given dissatisfaction on all sides. The policy of the Post Office has been extremely vacillating, but of recent years it has been directed to securing for the National Telephone Company, the only telephone company in existence in the country, a practical monopoly of the telephonic business. The Post Office itself possesses a few exchanges, but they are of comparative unimportance and have never found favor with the public. Owing to the Post Office declining to license competing companies, the National Telephone Company has been able to secure its present position, which constituted practical monopoly until the municipalities took up the matter. Had the Post Office licensed competing companies freely, the plan which the National Telephone Company has successfully followed, of buying up its opponents, would have failed as it could not have dealt in that manner with innumerable licensees.

When the municipalities found that there was no hope of obtaining relief from bad service and high rates through the operation of ordinary commercial demand and supply, the idea was conceived of obtaining licenses for the purpose of themselves competing in their own special districts. In 1898 public clamor against the oppressive telephone monopoly became so great that Parliament was obliged to interfere, and by a bill passed in 1899 municipalities were empowered to undertake telephone business under license from the Post Office. A good many corporations have applied for and received licenses.

### Guernsey System.

Before the Act came into operation, the state, or municipality, of Guernsey, an island of 24 square miles area and 40,300 inhabitants,

situated near the coast of France and about 70 miles from England, which had been left without a telephone service by the National Telephone Company, established a telephone system of its own, which has since greatly developed and has been worked so as to yield most satisfactory results financially and otherwise. The original estimate was for 300 subscribers, but on the 31st of December, 1902, the number of lines in operation had grown to 1,097, being about one telephone line for every 36 inhabitants. The rates charged were originally divided into three tariffs; £5 13s. for flat rate, and two toll rates. Subsequently, the financial results proved so good that it was found possible to reduce the flat rate to £5 and also to modify one of the toll rates.

The capital cost has been about £18 per line. All the system is metallic circuit, and about one-third of it is contained in underground cables. It extends to every part of the island and is operated by means of 8 switchrooms. The financial results have been satisfactory, as, in addition to paying Post Office royalty, which amounts to 10 per cent. on the gross revenue, about 13 per cent. of the amount of capital expended has been paid off out of revenue, and a balance remains in hand as a contingency and depreciation fund. The Guernsey system continues to extend and has proved of very great service to the island.

In the adjacent Island of Jersey, in order to prevent the municipality from following the example of Guernsey, the National Telephone Company reduced their rates to the Guernsey figures, a step which has been followed by a great development in Jersey also. Previously in this island the rates had been £10 per annum and the number of subscribers few.

#### Glasgow's Telephones.

The first municipalities to take licenses under the 1899 Act were Glasgow and Tunbridge Wells, in the south of England. The service in Glasgow had long given rise to great discontent. In 1897, out of 5,000 subscribers, over 3,000 had formally complained of the badness and dearness of the service. The rate in Glasgow was £10 per annum in the centre of the town within a short distance of the switchrooms, but subscribers in the suburbs, or at greater distance from the switchrooms, were charged as much as £20 and £24 per year.

The corporation of Glasgow began to construct its system in July, 1900, and in March, 1901, opened their exchange with some 1,500 subscribers working, the rates being £5 5s. per annum flat, and £3 10s.

per annum and 1d. for each outward call toll. Since then the exchange has grown with great rapidity and at the date of writing has 8,034 lines in operation connected to 14 different switchrooms. Of these about 5,500 are connected to the central exchange in Renfield street. The corporation lines extend to all the neighboring towns and villages within the licensed Glasgow telephone area, which comprises 143 square miles. The system is air-space cable laid in iron pipes. In the centre of the city it is entirely underground, the leads being taken into the subscribers' premises in the same manner as gas and water pipes. In the suburbs, air-space cables are taken to poles or other suitable distributing points from which silicium bronze wire connects with the subscribers' places. In anticipation of a great and rapid increase the city has laid spare pipes and spare cables with a most liberal hand, and has spent between £70,000 and £80,000 solely in making provision for future wants. Apart from this expenditure the cost per line has been between £19 and £20.

Only one set of accounts have been published—those for the Glasgow financial year ending May 31, 1902. These accounts contained the result for nine months only, and after providing for Post Office royalty, interest and sinking fund and carrying forward to the next year the proportion of prepaid rentals proper to that year, showed a surplus of £398. No depreciation was allowed for because the system was entirely new, but it is intended to create a depreciation fund out of the profits of each year. The amount of rentals carried forward to the following year amounted to £12,417, a sum which remained in hand. The policy of carrying telephone rentals forward, owing to the fact that they partly cover a period not yet reached, is a doubtful one, since new rentals are always falling due.

Orders continue to be received by the Glasgow corporation at the average rate of 10 per diem, and there is no doubt that the exchange will grow to be a very large one. The service is considered satisfactory by the subscribers, and applications have been received from numerous towns lying just outside the Glasgow licensed area to have the corporation service extended to include them.

#### **Tunbridge Wells Experiment.**

Tunbridge Wells corporation likewise took up the telephone question owing to the bad service and high rates which prevailed in that

town and district. At that time there were but 120 subscribers and 4 switchrooms in a population of about 90,000 spread over 180 square miles. Of these, 120, over 90 per cent., signed a petition to the postmaster general to the effect that the existing service was extremely unsatisfactory and very dear.

The corporation commenced business in 1901 with 300 subscribers, but the exchange grew rapidly, and on November 27 last, numbered 920 subscribers' lines, divided amongst 16 switchrooms. The rates charged were £5 17s. 6d. per annum flat and £3 10s. per annum and ½d. per call, or £2 10s. and 1d. per call. The National Telephone Company effected a very large reduction in their rates for the purpose of meeting corporation competition, making a rate of £4 per annum nominally to cover 5,000 calls, but as they neglected to count the calls the rate was practically a flat one; so that the corporation competition immediately secured for the Tunbridge Wells people a practically flat rate of £4 as against the £10 that they had been in the habit of paying. Under this stimulus the National Telephone Company's system also extended very rapidly and on November 27 they were in possession of probably between 700 and 800 subscribers' lines, making the total for the Tunbridge Wells area of about 1,600 instead of the 120 which preceded competition.

The company always showed very great activity in opposing the corporation in Tunbridge Wells, and owing to a change of personnel in the town council at the beginning of last November, was able to secure a majority in favor of selling the telephone system to the company on the plea that the corporation, having secured low rates and a good service, had achieved their purpose and were no longer called upon to compete. This view was combated very strongly by many of the citizens. Corporation subscribers offered to pay higher rates, if necessary, and to form a guarantee fund rather than allow the service to fall into the hands of the company; but the resolution to sell was nevertheless carried. The price obtained was £28,000, which was more than £3,000 in excess of the amount which had been expended, and the company came under an obligation to continue the corporation rates, with very slight modification, and to accept new subscribers on the same terms in perpetuity. It was alleged, although without truth, that the corporation system was being worked at a loss, and the constant assertions to this effect, which were given prominence in the press,

at the November municipal election and in every other possible way, disturbed the minds of the ratepayers and doubtless materially contributed to the changes in the town council which brought about the sale of the corporation's successful and solvent undertaking. The transaction has been denounced as the first Tammany operation in Great Britain.

#### Other Instances.

The corporation of Portsmouth, a town of nearly 200,000 inhabitants, opened a corporation service in December last. It has now four switchrooms working with 555 subscribers connected. There are between 600 and 700 more to join up, and new orders are constantly received. The National Telephone Company's service in Portsmouth, as in most other places, has given the gravest dissatisfaction, and to this fact is due the creation of the corporation exchange. The rates charged are the same as at Tunbridge Wells.

The corporation of Swansea, a town in South Wales of nearly 100,000 inhabitants, has commenced the construction of a municipal exchange for which nearly 1,000 orders have already been booked. The rates fixed are a shade lower than those at Tunbridge Wells. The corporation has erected a special building to serve as central switch-room and offices for the telephone department. The system adopted, as in every other case, is metallic circuit contained in air-space cables in the centre of the town and aerial lines further afield.

The corporation of Brighton, a town of about 140,000 inhabitants in the south of England, has likewise commenced the construction of a telephone system for which they have obtained about 1,000 orders to begin with. The rates are to be £5 10s. per annum flat, and £3 10s. per annum and 1d. per call toll.

The corporation of Hull, one of the chief shipping ports on the east coast of England, has also obtained a license and is now advertising for tenders for the construction of a system. They have likewise about 1,000 orders to begin with.

The corporations of Manchester, Salford and Stockport are well advanced with a scheme for working a joint corporation telephone system, the capital to be contributed and the surpluses divided in proportion to their respective rating values. Many other corporations are considering the advisability of starting telephone exchanges, but excepting the above none has advanced beyond the initial stages.

PUBLIC TRANSPORTATION  
WITH SPECIAL REFERENCE TO LIVERPOOL TRAMWAYS.

By C. R. BELLAMY.

The problem of public transportation in all large cities is rapidly becoming of first importance. The central congestion resulting from the growth of large towns, the increasing difficulty of reaching the ever extending suburbs, the loss of time and money in doing so, place cheap, adequate and speedy transportation among the principal necessities of town life. In Great Britain the municipalities have largely concluded that it should be taken up in the common interest and that transportation facilities should be worked entirely for the common good, placing them in the same category with water and artificial light.

The British Tramways Act of 1870 included a clause empowering local authorities in all cases in which private companies undertook the work to purchase the undertaking at the end of twenty-one years, at its then value, regardless of good will. The initial work of providing tramways was largely left to companies, but under the operation of the clause referred to and with the necessary lapse of time, the municipal authorities have been taking over the tramway undertakings with results that have been marked with the greatest possible good to the community in every case. The exercise of these powers has caused some feeling among the company promoters and other self-interested persons, with the result that an attempt has been made to criticise adversely municipal trading.

It is alleged that municipalities are so intoxicated with ill-founded belief in the success of their present undertakings that they are likely to add to them, so as to include the provision of every requirement of life, as some one has put it, "from municipal sterilized milk for infants to municipal cremation for the ratepayers when they have ended their course." Digressing for a moment, I should like to say that the Liverpool medical officer is particularly gratified with the results that have



attended the introduction under his charge of cheap, guaranteed, sterilized milk. One would think that there could be but two opinions: firstly, that such a provision is necessary, having regard to the very high infantile mortality in every large town; and secondly, that it could not be left to private enterprise seeing that the very poorest classes have to be reached at a cost within their means. The disposal of the dead is a common requirement, and as cremation is opposed to general sentiment, but most sanitary, it is unlikely that the process will progress except under the care and aid of a municipality. These methods of dealing with matters of importance to the community are referred to as showing a tendency toward "parental government," which I venture to think is a form of control not to be despised, but all must admit, essentially honest and, as far as the British municipalities have gone, highly progressive.

A bogie has been raised. Municipal indebtedness in Great Britain has largely increased in recent years, and the most doleful pictures are painted without reference to the vast municipal assets that are accruing as a result of the growth of the capital expenditure. The balance sheet of any municipality would entirely dispel all the delusive matter that has been put forward in this connection. Again, reference has been made to what is termed the question of depreciation on works controlled by municipalities. It is alleged, firstly, that there is no profit on them, and, secondly, that proper depreciation is not provided.

There are two forms of profit attending a municipal undertaking: the profit that results to the individual by reason of increased facilities or better articles at lower rates, and the profit that stands out as a net balance after all financial obligations have been met. The latter is really unimportant if the first is considerable, but I propose to show you that both are substantial under municipal management.

On the question of depreciation the position assumed by our critics appears to me most untenable. The legislature in Great Britain considers that it is sufficiently safeguarding the ratepayers by insisting that municipalities shall build up a sinking fund to extinguish the debt over a period of years, which in the case of tramways is usually twenty-five. This surely is a depreciation charge and a heavy one, seeing that it applies to the total capital account and not merely to that portion that is represented by machinery, stock or works, likely to have a short life. The municipalities have not only met this liability, as they are

bound to do, but they are going far beyond it by providing substantial funds to meet obligations which are not yet apparent but may possibly arise. This may be termed a second depreciation charge and the fact that it is necessary, if the best results are to be obtained, to maintain in the highest possible condition, out of revenue, all municipal works, is in the nature of a third depreciation charge. Nevertheless, our critics are trying to show that the present generation is not making sufficient provision in arranging to hand over to posterity these huge undertakings at the end of twenty-five years free of all indebtedness. It would be matter for small wonder if the opposite view were taken and a claim advanced for greater consideration in the present.

Curiously enough, criticism of municipal methods in England appears to have emanated principally from our American cousins, who are kindly offering us assistance in dealing with questions of transport in London, though the requirements in New York in this respect strike me as being very much more pressing. They appear to be imbued with a lack of faith in the moral stamina of municipal government, representing that its members cannot be trusted, that they are without technical knowledge of such questions as those appertaining to lighting, water, tramways, etc., that they are in office only for short periods and have not time to devote to the detail of the work.

In England men of the keenest business acumen and of the highest standing are associated with municipalities through long periods of years, ten, twenty, thirty and even forty years. They are expert in all that pertains to municipal government. Patriotic regard for everything that operates to the well-being of their town and a desire to secure equally good results with those obtained in other towns lead them to devote a large amount of time, care and energy to the discharge of their duties. With this devotion to municipal duty, aided by the assistance of the most carefully selected and highly trained permanent officials, there need be no fear as to the management of municipal undertakings.

All the objections to municipal trading are summarized in a mere prediction that it is fraught with danger to the community and will end disastrously. It is based on mere surmise and in most cases the wish is probably father to the thought. On the other hand, British municipalities can defend their operations in the best possible way by rendering a good account of their stewardship, and since an ounce of

fact is worth a pound of opinion, I propose to give you a brief account of what is happening in Liverpool in connection with the municipalization of tramways.

#### Liverpool's Experience.

In 1897 a company was renting the tramway lines, which belonged to the municipality, under an expired lease of seventeen years. The service was inadequate, the fares were high and there were loud complaints as to the conditions of labor of the employees. It was felt that mechanical should supersede horse traction, that the system should be largely extended and fares reduced. The company was not willing to make these changes and negotiations were opened resulting in the purchasing of the stock and shares of the company at a price slightly in advance of the then market value, which was well above par. The total agreed sum was £567,375 (about \$2,800,000). At that time the system consisted of 68 miles of single track worked by 267 horse cars, which were carrying 38 millions of passengers over 6 million car miles per annum, with a revenue of £290,000 (\$1,400,000).

It was at once arranged to scrap the entire undertaking and to adopt electric traction. Within three years after its acquirement, the whole of the 68 miles of track were reconstructed, together with 40 miles of additional new track, which were equipped with 400 regular cars. The total carrying capacity was quadrupled, the fares reduced by nearly one-half, the wages of the employees largely increased, their hours of labor reduced and all were supplied with uniform clothing.

It was a bold forward movement and was considerably criticised, but the response of a grateful public to the facilities afforded made it at once evident that the success of the new scheme was assured. The traffic returns for the last years of company and municipal management are as follows:

	1897.	1909.	PERCENTAGE INCREASE.
Passengers.....	38,409,084	109,335,585	184.66
Mileage.....	6,013,180	11,790,815	96.08
Receipts.....	£290,743	£506,526	74.25

#### Social Advantages.

The population of Liverpool is now 700,000 and 55 times that number were carried in the last year under the company's system, and 160

times under that of the municipality in 1902, at about half the old fares and with much greater speed and comfort. In addition, the change is tending to alter many of the conditions of town life. It is dealing slowly but effectively with central congestion of inhabitants. Land in the outlying districts, which was only regarded as agricultural, is largely in demand for building purposes. In the last year for which the returns are available, viz., 1901, the number of new houses built in these out districts was 1,600, or an increase of 200% over 1896.

The central institutions, markets, etc., are rendered more readily available to suburban residents, together with the parks and health resorts, under a unit fare of one penny (two cents), which carries a passenger an average distance of  $2\frac{1}{2}$  miles. In addition, the sanitary conditions of the streets have been largely improved by the removal of 4,000 horses, and statistics show that pedestrian traffic is better safeguarded under the new conditions, though the opposite was expected.

#### Recent Statistics.

In 1898, the last year of horse traction, the total number of fatalities in connection with tramways was eight and the ratio to passengers carried one in six millions. In 1902 the total fatalities amounted to the same number viz.: eight, and the ratio to passengers carried one in 13,667,600. The following are the principal figures applicable to the Liverpool tramways:

Capital expenditure .....	£1,832,977	\$8,756,280
Total revenue, 1902 .....	517,935	2,486,088
Operating costs .....	339,810	1,631,088
Percentage of operating cost to total revenue .....	65 per cent.	
Gross profits .....	178,124	855,000
Percentage of gross profits to capital expenditure .....	9.7 per cent.	
Interest and sinking fund .....	102,627	492,600
Balance .....	75,497	362,376
Divided as follows—		
Reserve, renewal and depreciation fund .....	50,331	241,584
Transferred to local tax account .....	25,165	120,792
Total operating charges per car mile .....	6.88d.	13.75 cents
Interest and sinking fund per car mile .....	2.089d.	4.17 "
Total charges .....	8.973d.	17.95 "
Car mile earnings .....	10.34d.	20.68 "
Average fare per passenger .....	1.111d.	2.22 "
Average length of 1d. stage .....	$2\frac{1}{2}$ miles.	
Length of track .....	101 miles.	

The operating costs in Liverpool cover the total charges on electrical energy, which includes works, cost, interest and sinking fund

charges, renewal charges, and proportion of profits applied to the relief of the local taxes by the electric power and lighting committee.

#### Gains of Municipal Operation.

Reviewing the position as between company and municipal control in the case of Liverpool, which may be taken as typical of the large British towns, it may be pointed out, first, that no one is suffering by the change. The share and stock holders, directors and officials, were bought out on ample terms. The competition with the local railway service has been helpful to the citizens and will probably lead the railway companies to a better organization. This being so, the principal advantages may be summarized:

(1) The gain to the traveling public during last year amounted to £320,000 (or \$1,500,000) as a result of lower fares. This is the first and principal form of profit to the community and is always entirely ignored by the anti-municipalists.

(2) The employees gained £40,000, with free uniform clothing.

(3) Notwithstanding these important concessions, the gross profits amounted to  $9\frac{1}{2}$  per cent. after maintaining the rolling stock, permanent way and machinery in the highest state of efficiency. Six per cent. of this amount has gone to interest and sinking fund,  $2\frac{1}{2}$  per cent. to a general reserve or depreciation fund, and the remainder, amounting to £25,000, was transferred to the relief of the local taxes.

It must be admitted on this statement that the present generation is vastly benefited by the municipalization of the tramways, and it only remains to inquire what are the risks, if any, to posterity. The capital expenditure of the complete undertaking has been shown to be £1,832,000. In addition to the building up of the sinking fund, which will extinguish the debt within twenty-five years, a renewal or depreciation fund of nearly £220,000 has been set aside, equal to 12 per cent. of the capital, which will continue to grow, and there can be no question that the undertaking is worth £1,000,000 above the capital value.

These facts afford ample evidence that the interests of posterity are more than amply provided for, and I venture to think, establish the proposition that the municipalization of tramways in large towns can be carried out with perfect security and to the great and lasting advantage of the whole community.

## PRIVATE CONTROL OF STREET RAILWAYS.

BY CHARLES T. YERKES.

The subject of municipal control is one which is now intently studied both in this country and in England, and it is surprising how varied are the opinions in regard to it. Perhaps it is because there is so much of self interest contained in the subject that our minds are naturally biased. I think I may say truthfully that I have endeavored to rid myself of any selfishness in considering the theme, but look only to facts which I have received from a long and active experience.

That the public is to be considered in all matters of industry is without doubt true. In our country with our government, the people—so called—should always be considered to the most extreme extent. May I be permitted to ask, "Who are the people?" My answer is, "The inhabitants of the country." Not merely the poor man nor the rich man nor the man of middle class, but all combined. It is the people in the busy strife of life who are entitled to the ownership and the possession of the properties of the country. To argue otherwise would be to put a premium on idleness, vice and laziness.

In my opinion it is right that a man should be permitted to succeed in this strife, that his success should be rewarded and that he should be allowed to leave as an inheritance the fruits of his acts. To place him in a position of that kind he should be able to own himself or in company with others not only private industries but public industries—if I may term them as such. Here we see what a slight difference there really is in these terms. A large dry goods establishment is a private industry. A small railroad is a public industry; both striving in the same manner, one to clothe and the other to furnish transportation. So it is really difficult when thoroughly considered to draw the line between the two. The one is generally a close corporation, while the other is very extended. It would be difficult to consider the fact that municipal control could be extended to the former. It is readily appreciated that the municipality would have a difficult task in hand-



ling an establishment of that kind. In reality, the railroad company would be even more difficult to handle than the large store.

There are several reasons, however, why I am sure that municipal control should rarely exist. First, all business ventures should be taken hold of intelligently and with due consideration for economy. How ridiculous to think that a municipality could run a railroad economically or wisely. The people who are connected with our railroads are, with few exceptions, men who have been brought up at the business, many of them having large interests in the companies. The details are understood and everything done to the end that the roads may be profitable. Economics are practiced, extensions are well considered, improvements are carefully looked into and the business is carried on in a profitable and economical way.

Can we for a moment imagine one of our railroads being managed by our city council or the state legislature? The results would be really amusing if they were not so serious. And I now ask the question, "Who owns our railroads?" and I answer "The people." I may safely say that millions of the population of our country have interests in our railroads throughout the land. They are, however, that class of people generally who have earned the right to that ownership. I fail to see any attempt at municipal ownership, in Europe particularly, but is a failure as considered with what it might be with private ownership. Take Glasgow, for instance, which is looked upon as being one of the best instances of municipal ownership in the world. We find the expense of construction and operation amounting to such a sum as would shame any private corporation. And the people who are in charge of the Glasgow works are most honorable gentlemen and I believe have done the best that their abilities permitted. We look through Europe and find railroad lines operated by the government, and where such is the case we can rest assured that the operation is not only most expensive, but extremely poor. Who would have the hardihood to think that if we had had municipal control in this country for the last twenty years we would have had this great system of railroads that now exists. The fact that every state by its laws promotes the growth of railroads and encourages private ownership makes our country teem with rails and their accompaniments. That this private ownership can be abused there is no doubt, but what cannot be? No matter what the abuses have been, the country is far ahead of anything like municipal control.

## CITY OWNING AND LEASING.

BY EDWARD M. SHEPARD.

I assume that I have been asked to speak on this subject because of the professional relation which for seven or eight years I have occupied to the board representing Greater New York in respect of its rapid transit system. Perhaps I may best begin with the theoretical origin of our municipal rapid transit system and later refer to its practical development.

In 1891 there culminated an agitation for public and systematic official attention to rapid transit on Manhattan Island. This was natural, because of the comparatively high probability of profit in intra-urban railway construction on this island for the reason that there were only a few great north and south streets in which, or over which, or under which rails could be placed. The theory then was that the ownership and the operation both must be private, although the property to be used was public property. For you will notice that in Greater New York more perhaps than in any other great city, the solution of the problem of rapid transit depends upon the use of public property—property which belongs to the entire community. The streets which, by reason of the great cost of private property, must constitute nine-tenths of rapid transit mileage, belong in fee to the city. Therefore, it may be said at the very outset that the burden of proof, even at the time of that legislation, was and that it still is upon those who insist that streets or any other public property shall be used by private persons or private corporations. The presumption must naturally be that all public property is to be used for public purposes, and that it ought to be used by those who are vested by the people with public authority.

In our country and in this city during its rapid transit legislation down to and including the act of 1891, the idea was prevalent that municipal construction or operation was practicable. Prior to 1894 the idea of such construction or operation denoted, or connoted, for the great majority of citizens extravagance and incompetence in administration. So when the late Abram S. Hewitt, as mayor, pro-

posed in 1887 that the city of New York should take some part in the construction of a rapid transit line in a sort of partnership with the New York Central and Hudson River Railway, he was careful to practically limit the city's intervention to the use of its credit and to provide that the ownership and the operation of the road should be separate.

Until 1894 there had been a complete failure, whether under the act of 1891, or otherwise, to secure private capital for the development of rapid transit facilities without undue sacrifice of public convenience and public property. Such undue sacrifice meant use of street space for elevated railways, with the incidental obstruction of light, air and access and other inconvenience, besides intolerable ugliness. It was then just as clear as it is now that inconvenience and hardships to the city must come with any overhead construction in the streets of its populous neighborhoods.

In 1894, after the complete failure to obtain relief under the Act of 1891, it was proposed that there should be municipal construction and private operation. Legislation to that end was then passed, subject to submission to the people of the then City of New York, now the Boroughs of Manhattan and the Bronx, by a sort of plebiscite. The essential condition was that construction should be permitted only if and when the city should absolutely be guaranteed against loss by the private persons who should come forward to construct and operate the road. Unless the city were absolutely indemnified against loss, it was not to be permitted to build. Now by a very large majority of the popular vote that plan was approved. Later, after consolidation of the several cities into Greater New York, the legislature extended the system to all the boroughs.

You must always remember that with respect to this particular construction, the cardinal proposition is to give no contractor the right to construct unless he assumes the burden and is accorded the right of operation of the road for a period not less than thirty-five or more than fifty years. During that period he must repay to the city the interest which the city pays upon the bonds issued to provide the money which constructs the road, and pay into a sinking fund one percent. annually, so that allowing for proper compound interest, the city will, by the end of the fifty years, find itself the owner of the road without having paid net any material amount for its construction.

Since the obligation on the part of the contractor is that he will

build the road and pay the city as landlord during the term of the lease, say fifty years, a rent that is roughly speaking four to four and a half per cent. (that is to say, three per cent, or perhaps somewhat more, interest and one per cent. for the sinking fund), and since the total amount of this rental will be very large, he must give very large security. In this view, the appellate division of the supreme court at one time required a bond with the really impossible penalty of \$15,000,000. No such bond could be given. That bond was afterward reduced to \$5,000,000. The city, upon the Manhattan-Bronx construction now taking place, has a bond for the payment of rent in the sum of \$5,000,000, a deposit of \$1,000,000 in cash, a deposit of \$1,000,000 in securities and in addition a first lien upon the entire equipment, costing twelve or thirteen million dollars. The city is, therefore, indemnified beyond reasonable peradventure against loss upon future municipal construction so long as the present law remains.

In the interesting contract made between the city and Mr. McDonald (a contract, by the way, transferred under public authority to the Interborough Company), the dominant feature from beginning to end is hardly so much the provision of rapid transit facilities as it is the preservation of the city from possible loss. We have heard the criticism that the lease should not have been so long as fifty years with a renewal of twenty-five years. The critics forget that only three years ago not one railroad man could be found who was willing to incur the risk of the rapid transit contract. It is perfectly proper for me to state information which was and is public property. The Rapid Transit Board conferred with the Vanderbilts, with Mr. Whiney, with Mr. Gould, with Mr. Clark—then president of the New Haven Railroad Company—from whom came the most hospitable treatment accorded by anybody to the rapid transit plan, and with other railroad magnates, greater or less; and all of them—so the results implied—were of one opinion that from a financial standpoint the enterprise was sure to fail. These gentlemen failed to realize the steady development of transportation in this borough within the last sixty or seventy years and the corresponding increase in the receipts and profits of those who did the business. To-day it is found that the growth of the city is such and the number of passengers carried to and from their business has so much increased that the present value of the future profits from the operating part of this contract, which they would not under-

take, is estimated at \$30,000,000 and for ought we know may, in the future, come to be worth upwards of \$50,000,000. In criticising the authorities for making the contract as liberal as they have, it is to be remembered that the experts, whom I have mentioned, but two or three years ago believed, not only that there was no profit in the enterprise, but that there was an inevitable loss to the venturous contractor. No one then would enter into this contract with the city.

Now that is all retrospect. When we made our contract for the extension to Brooklyn—the Brooklyn-Manhattan road—we promptly found a responsible contractor, and he a practical man, who was glad to build the road for one-fifth part of its actual cost. Now I believe myself that the movement has been extended so far that in the future, if the law shall remain as it is, we are likely to make contracts providing payments by the contractor to the city for the mere privilege of constructing and operating the road.

So much for municipal construction. But what about municipal operation? You have to remember, as I said before, that the rapid transit problem is here a problem of using public property, that is to say, the streets for public purposes. Every rapid transit railroad in this city will be a street railroad under ground or elevated—but not, I hope, elevated. With all due respect to Mr. Yerkes, it seems to me quite impossible that the average good citizen should fail to see that, when public property is used, the use ought to be for public purposes, and that it ought in general to be under public control.

But that is not an answer to the whole question with which you are concerned. You ask, "How shall we control public service corporations?" Most of you have probably read the plans for further rapid transit proposed by the chief engineer for the boroughs of Manhattan and the Bronx. Those plans, which the rapid transit board now has under consideration, contain in the rough and subject to modification, what undoubtedly is to be the future rapid transit of the Greater New York. I have little doubt that the contracts for that work will prescribe shorter terms for the leases. Instead of a lease of fifty years, as in the case of the road under construction here, or of thirty-five years, as in the case of the Brooklyn road, you will hereafter probably have leases for shorter terms. I myself think that in the future—not at once perhaps but in the near future—twenty years will not be deemed an unreasonably brief period before rental shall be readjusted.

On the question of private operation or public operation, we have to remember that the city acts through agents, its mayor, its comptroller and its Rapid Transit Board. It must act by its agents, high or low, more responsible or less responsible, just as any other corporation has to act. If we were to have what is called municipal operation, the city would still act with more or less indirection. The question then arises whether even on the general theory of direct operation, you shall treat the operation of the road as you treat the construction, if you please, of an aqueduct or court house. The city to-day does not build its own court houses by masons and carpenters on the municipal pay-rolls, although the construction is municipal. The appellate division court house a few doors from here was built by a contractor, and contract was made for its building. When the Jerome Park aqueduct, that enormous structure, was proposed, a contract was made; and so with the present municipal construction of railroads. In all important municipal work now in progress, with hardly an exception, I think, the construction itself takes place under a contract, although it is the city that is doing the construction. That, no doubt, is because on the whole the economy will, it is thought, be greater under a contract than if you have the engineers, clerical forces and laboring forces, all directly employed by the city. If we shall survive, as I hope and believe we shall survive, to the day when it will be thought to be an absurdity and a danger that any of these forces shall be in politics, no doubt the problem with us will be made a great deal easier. We may deal with its solution upon more theoretical lines, and dispense with many kinds of contract we now deem essential to the financial protection of the city.

I conceive that, in working out municipal operation, the necessity is not so much that the contractor or the general manager of the road, or the superintendent of motive power, or any other head of department shall be an appointed public official—it is not so much who it is who appoints the employees—as it is whether the public is properly represented and in fact controls the operation of the road. That may to a great, and perhaps a sufficient, extent be done under a contract and through a contractor. The extent and character of the conveniences which the road shall extend to the public are all dealt with in this very elaborate McDonald contract.

In the chapter dealing with operation, it is provided in the first



place generally that the road shall be operated according to the very highest standard of municipal railway operation the world over. Then specifically it is provided that there shall be the best railway carriages and the best motive power, that the trains shall be run with the maximum speed which safety permits, that the facilities for night service and for day service shall be of the best, and so on. To a very large extent you will find that those and like matters are set out in detail. Thus the headway between the hours of one and five in the morning is prescribed, and so also the details as to waiting-rooms, sanitary arrangements, etc., etc. All these things are dealt with in a greater or less degree. And, as I said, there is the overruling and inclusive provision that, whatever may be the omissions of specifications in the agreement, the mode of operation shall always be the best that is known to either public or private operation of such railroads.

In the second place, the law gives to the rapid transit board which represents the city the right of what equity lawyers call an action for specific performance, or such other form of action as the lawyers prefer to compel a performance by the lessee of the details which are thus prescribed. If the contractor fails in any respect, the lease may be forfeited, or he may be compelled to perform; or in case of his failure to perform, if he fail to operate the road to the maximum efficiency, the city is entitled to enter into the occupation of the road and to operate it and hold the contractor for the loss, if any there shall be under such a system of municipal operation.

That is the nature of the present rapid transit contract. The city has not abdicated its control of the operation of the road any more than it has of its water works. It has prescribed as well as human wisdom and foresight permit the main features and details of operation. Then, as I have said, it has safeguarded the whole situation with the requirement that if these details shall become obsolete the road, nevertheless, shall be operated according to the highest standard, that is to say, the highest standard at the time known in the world whether within or without the city of New York.

Now I ask whether in a true sense that is not municipal operation? Do not the municipal authorities determine how the road is to be operated? Have they not a direct practical control of the operation under such a contract? The fact that the city does not itself employ the practical men, whether the business men or the laboring forces, in

the operation of the road, does not, in my judgment make the operation to be any less municipal operation.

It is said with very great force that no matter how careful you are with your contract provisions when you make a contract for fifty years, nevertheless, if you withhold the right to take the road from the company, the city does not perfectly and presently control operation. Therefore, in my opinion, formed upon the history of New York rapid transit, every effort should be directed to making the term of the lease the shortest possible. When I say the shortest possible term, I mean the shortest term that is consistent with the assumption by private persons or private capital of the financial risk involved to the lessee bound to a rental. Whether we can go on that principle now, I do not know. I share myself the strong public sentiment in favor of every practicable and safe extension of prompt and present public control of persons and companies using streets and public facilities.

That the time is now ripe in Greater New York or in any one of the larger American cities to do precisely the thing that has been done so admirably in Liverpool as we have been told, I am not prepared to say. I think it would be wise for us to try the experiment that we have entered upon here somewhat longer, with leases briefer and upon terms less and less favorable to the lessee, or rather more and more favorable to the city. When contracts shall be made for these roads which the city is building or is to begin to build, the terms can be made far more favorable to the city and far more onerous to the contractor than would have been possible two years or one year ago.

If the terms of the leases shall be reasonably sure; if the readjustment of rentals shall be at even shorter intervals so as to secure to the city the full rental, or well nigh the full rental, value of the road at all times; if the contract prescribe for the public the various facilities and details of operation which are in the public interest; if there be power from time to time and at any time to intervene with the requirement that the contractor shall observe the highest standard of railroad operation; if all this be made practicable, I cannot but think that we shall have the essential features of municipal operation free of many of the burdens and risks which are incident to the performance of municipal work through great numbers of public officers and great bodies of employees directly appointed by mayors, or heads of departments.

## THE EXPERIENCE OF MASSACHUSETTS IN STREET RAILWAYS.

BY LOUIS D. BRANDEIS.

The aggregate length of street railway surface lines in Massachusetts, September 30, 1902, was 2086 miles, as compared with 2106 miles of steam railroad lines, not counting in either case second or additional tracks or sidings. Of these street railway lines, 1172 miles have been constructed since September 30, 1895. The average dividend paid on the outstanding capital stock during the year ending September 30, 1902, was 5.23 per cent. It is believed that the street railway mileage in Massachusetts is larger in proportion to area and population than in any other state of the Union, and that the transportation facilities compare favorably with those afforded elsewhere.

The Massachusetts system of street railway surface lines has been developed under a law having these peculiar features: First, a revocable franchise; second, an effective prohibition of stock watering; third, an effective system of franchise taxes.

### The Revocable Franchise.

Locations are granted in cities by the board of aldermen and in towns by the selectmen, subject in each case to the approval of the State Board of Railroad Commissioners.\* The aldermen in cities and the selectmen in towns have likewise the power, subject to the approval of the railroad commissioners, to revoke the franchise of any surface street railway at any time after the expiration of one year from its opening for use "if the public necessity and convenience in the use of streets" so require.

While the right to revoke locations has not been frequently exercised (except as an incident to changing routes or alteration of streets), the right of revocation has been fully sustained by the supreme court, and is universally recognized in practice. The grant

\* A limited power is vested also in the railroad commissioners to grant a location which is required as a connecting link between locations already granted to the same company in two other towns or cities, if the local authorities have failed to grant, or have refused to act upon, the locations applied for for such purpose.

of the location is substantially a license during good behavior. The existence of the right of revocation has proved an effective means of securing to the people proper transportation facilities.

The process by which reasonable demands of the people for better transportation facilities or lower fares are ordinarily secured, is this: A demand is presented in the first instance to the company, not by the local authorities, but by a voluntary committee formed to represent the people. If the company does not yield to the demands of the community thus expressed, there follows a petition to the railroad commissioners. The board gives a public hearing, at which the petitioners and the company are usually represented by counsel. The decision is rendered in the form of a recommendation; for the railroad commissioners have little compulsory power. Largely because of the reserved power of revoking locations, such reasonable demands of the local public, if approved by railroad commissioners, usually result in immediate compliance on the part of the company with the recommendations of the board.

A marked instance of the influence of this reserved right of revocation is furnished by the struggle for a five cent fare recently conducted by the inhabitants of Roslindale. Roslindale is a station on the Dedham branch of the New York, New Haven and Hartford Railroad, six and a half miles from the heart of the city in the suburban district of Boston known as West Roxbury. Around this station is a thickly settled region occupied largely by people of small means. The West End Street Railway system, which is leased to the Boston Elevated Railway Company, does not extend in this direction beyond Forest Hills, a station about a mile nearer city hall. The street railway service beyond Forest Hills throughout West Roxbury, including about eight miles of lines, is conducted by an independent company known as the Old Colony Street Railway Company.

The inhabitants of Roslindale, although having the double facilities of steam railroad and street railway, believed themselves less favored than other portions of the outlying districts of Boston, because they were denied a five cent fare to the heart of the city. The lowest possible fare on the steam railroad is at the rate of six and six-eighths cents. By the street railways the fare is ten cents, as the passengers have to travel over both the Old Colony and the

Boston Elevated-West End system in going to and from the heart of the city. No system of free transfer between the two lines exists.

The effort was made first to secure from the steam road a five cent fare to Roslindale, but the railroad commissioners refused to recommend the reduction. An application was made to the Boston Elevated Railway Company to extend its surface lines to Roslindale and beyond. This was found to be impossible, because the only available avenue was occupied by the tracks of the Old Colony Street Railway. Application was then made to the board of aldermen to have locations of the Old Colony System revoked in order that the same locations might be granted to the West End Company.

The demand for a five cent fare, which originated with the residents of Roslindale, had meanwhile spread generally to the inhabitants of the whole of West Roxbury, which extends to a point ten miles from city hall. The request for the revocation of the location enjoyed by the Old Colony Street Railway Company, supported by the residents of a large section of the city, became so formidable that the two street railway companies recognized the necessity of yielding to the people's demands. An act was accordingly passed at the 1902 session of the Legislature, by which the Boston Elevated-West End system is authorized to lease all of the line of the Old Colony Company within the limits of the City of Boston. The lease has just been submitted to the railroad commissioners for their approval. Thus the people of the whole of West Roxbury will secure the five cent fare and through lines to the heart of the city.

#### Prohibition of Stock Watering.

The aggregate capital stock of the Massachusetts surface street railways on September 30, 1902, was— \$47,653,028.00

The aggregate indebtedness, funded and unfunded, was— 55,894,052.67

Their aggregate net capital investment was— 100,766,796.93

Their aggregate net assets were— 105,006,087.38

of which \$24,120,358 consisted of real estate, machinery and other permanent property, and \$20,754,384 of equipment. The cost of construction was \$55,130,759. The average construction cost per mile of line, as charged in the accounts, excluding real estate, machinery and equipment, is \$26,428.93. This low construction charge

(including, as it does, second tracks and sidings) is accounted for by the fact that the locations granted, being revocable, are not treated as an asset in Massachusetts.

The cash capital actually invested in Massachusetts surface street railways is probably in excess of the sum of \$100,766,797.93, which appears as the net capital investment; for while the stock of many companies has been, to a slight extent, watered, in spite of the statutory prohibitions, this watering has been more than offset by the large amount of stock issued and sold under the law at a premium, when issued to increase capital.

This substantial prevention of stock watering has been accomplished by means of the following provisions of law:

1. The original authorized capital must be fully paid in in cash at not less than par before any certificate of stock can be legally issued, before the company can be authorized to do business, before the issue of any bonds can be authorized and before any increase of stock can be made. Furthermore, until such payment, directors are made personally liable on all debts and contracts of the company. This provision secures the payment in cash substantially at par of the whole original authorized capital.

2. The issue of all bonds and of any increase of stock in excess of the original capital is limited to such amount as the railroad commissioners shall, after a public hearing, determine will realize the sum which has been properly expended or will be reasonably required by the corporation for proper corporate purposes. No stock can be issued at less than par.

These provisions not only prohibit stock dividends in any form, but actually prevent them. Thus, the Massachusetts electric companies (which control the Old Colony Street Railway Company and the Boston and Northern Street Railway Company) in June, 1902, applied for an issue of \$1,250,000 of stock of the former and \$2,250,000 of stock of the latter. The railroad commissioners authorized an issue only of \$948,700 of Old Colony stock and \$1,797,300 of Boston and Northern stock, requiring the former to be sold at not less than \$110 per share and the latter at not less than \$130 per share.

In July, 1902, the Boston Elevated Railway (which, in this respect, is subject to the same provisions of law) applied to the rail-



road commissioners for leave to issue \$5,000,000 additional stock to pay for construction, equipment and land damages. The railroad commissioners authorized the issue of only \$3,300,000 of stock and required the stock to be sold at not less than \$155 per share, that being the prevailing market price.

3. No lease, consolidation or sale of any street railway can be made without the approval by the railroad commissioners of the terms thereof.

Thus, in 1897, the stockholders and the directors of the West End Street Railway Company and of the Boston Elevated Railway Company voted that the West End Company should lease its system to the elevated for a period of ninety-nine years, on the basis of the payment as rental of eight per cent. on both the common and the preferred stock of the West End Company. The railroad commissioners, after a public hearing, refused to approve the lease as voted. The parties, following the suggestions of the board, subsequently executed a lease by which the term was reduced to less than twenty-five years and the dividend on the West End common stock to seven per cent. The average dividend which had been paid upon the common stock for nine years prior to the lease was 8.6 per cent.; but the railroad commissioners refused to approve a rate higher than seven per cent. because, in the opinion of the board, the dividends paid by the West End Company prior to that time had exceeded its actual net earnings, making due allowance for depreciation.

#### The Franchise Tax.

Street railway companies are required to pay, in addition to the ordinary local taxes on real estate and machinery assessable to all owners of property, a so-called franchise tax, which is assessed upon the aggregate market value of its capital stock, less the value of real estate and machinery locally taxed within the Commonwealth. The rate of this tax (which is the same as that assessed upon the franchises of other Massachusetts corporations not enjoying rights in the street) is now \$16.18 per thousand. The amount collected on this tax is paid to the municipality in which the tracks of the street railway company are located. If the tracks extend into more than one city or town, the tax is divided among the several municipalities in proportion to the mileage of main track on the public

highways in each municipality. The aggregate of such franchise taxes assessed in Massachusetts for the year 1901, including such taxes paid by Boston Elevated Railway Company, was \$956,738.69, which is equal to about 1.6 per cent. upon the outstanding capital stock of all of the companies, and about four per cent. upon their gross earnings from operation. The tax is small, but it is promptly paid. For instance, of the total of these taxes assessed for the year 1901 (\$956,738.69) and payable November 1, 1901, there remained unpaid, on January 1, 1902, only \$2,224.75.

Provision was made in 1898 for the payment of additional compensation for the use of the streets, by the act which declared that "all operating companies paying dividends in excess of eight per cent. shall pay to the state as franchise tax an amount equal to the excess paid stockholders in dividends over eight per cent., provided, however, that no tax shall be payable if the aggregate dividends paid to the corporation since its organization do not equal six per cent. upon its capital stock." No payments have as yet been made under this act.

The Act of 1898 also provided for a so-called commutation tax; that is, a specific tax, varying in amount from one to three per cent. of gross earnings per mile, in commutation of the obligations previously existing to keep streets in repair and cleared from snow. Payments are regularly made under this act.

#### Underground and Elevated Lines.

In addition to the surface lines, there are in Boston (1) about 1.7 miles of completed underground or subway lines, 1.4 miles are under construction, and provision has also been made for early construction of additional lines; (2) about six and one-half miles of completed elevated lines.

All the underground and all the elevated lines are situated in Boston and form a part of the Boston Elevated-West End Street Railway System. To these underground and elevated lines, exceptional provisions in regard to tenure and the payment of franchise compensation have been attached.

In order to afford proper transportation facilities in Boston, it is necessary that most of the important street railway lines should reach the heart of the city. The streets available for railways there are few and narrow.

Prior to 1893 the congestion had become intolerable. Real estate values rendered the widening of streets or the construction of new ones, or the building of an elevated road in this region financially impossible. Besides, the people would not have permitted the disfigurement of that part of the city by the erection of an elevated railway. It was accordingly determined to build the subway. The West End Street Railway Company was given an opportunity to build and own the subway. It refused to do so, partly on the ground that, having but revocable rights in the surface line, the investment would not be prudent. The city was forced to build the subway itself. The act providing for its construction authorized leases to operating companies for a period not exceeding fifty years.

Soon after the passage of the act in 1894, the people realized that a lease of the subway for the full term of fifty years would seriously impair the control by the community of its local transportation system. Public agitation resulted in an amendatory act reducing the limit of any lease of the subway to twenty years. The first subway act provided for the compulsory removal of the surface tracks along the line of the subway on Tremont and Boylston streets, for a distance of about a mile, where the greatest congestion prevailed. It was clear that the West End Company would, in order to connect several of its surface lines and maintain possession of the field, be obliged to take a lease of rights in the subway.

In 1896, before the completion of the subway, the West End Company consented to take a lease of the subway for twenty years from its completion, at a rental equal to four and seven-eighth per cent. of the cost of construction—a rental sufficient to pay interest and to provide a sinking fund which will pay for the subway in about thirty-seven years.

In 1897 the promoters of the Boston Elevated Railway Company, having bought an old and impracticable charter from the original owners, secured from the Massachusetts legislature radical amendments thereto, which rendered the construction of an elevated line financially possible by allowing the elevated line to lease the West End System and use the subway, and also secure the surplus earnings of the surface lines.

The amended charter enabled the company to acquire, so far as the line should be built, within ten years from the date of the

act, a substantially permanent franchise in many of the principal streets of a large part of the Boston Metropolitan District, authorized a lease of the West End Railway surface lines, together with the subway, provided for an extension of the subway to connect with the proposed elevated line to Cambridge, and for a tunnel under the harbor to connect with the East Boston surface lines. It contained also provisions protecting the company for a period of twenty-five years from the date of the act from a compulsory reduction of the fares below five cents or the imposition of any additional special franchise taxes.

If the locations thus granted to the Elevated company were all built upon, the Elevated company would have a substantially complete and independent street railway system, and Boston would necessarily lose, to a great extent, the control which it now enjoys over its transportation lines. But only that portion of the elevated road has been built—about six and one-half miles, which it was necessary to construct in order to prevent the lapse of all charter rights. It is not probable that any more will be built except the extension to Cambridge, which the charter also makes obligatory. For heavy land damages render the cost of elevated lines in Boston so great that much additional construction is a financial impossibility.

The construction of the elevated railway was undertaken probably less with a view of promoting rapid transit than for the purpose of capitalizing the surplus earnings of the West End System and of securing, in connection with a long lease of the West End lines, a control of the transportation system of Boston and vicinity. This purpose was frustrated, however, in spite of the exceptional privileges granted to the Elevated company, by the determined struggle of the people to retain control of the transportation system—a struggle in which they were supported by the railroad commissioners and aided by peculiar local conditions which soon made further legislation necessary.

The elevated trains pass for a distance of 1.7 miles through the subway. No elevated line could, by reason of heavy land damages, be built through the heart of the city. The two ends of the elevated road must be connected by some line through the heart of the city, and a subway is the only feasible method.

Before the elevated road was in operation, it became evident that an additional subway through the heart of the city would be required, because the existing subway was insufficient to provide for the large and increasing traffic. Upon the opening of the elevated lines and their use of the subway, it was found that the existing subway was not only insufficient, but by reason of numerous curves and because of other features, was not well adapted for use by elevated trains.

In 1900 the construction of an additional subway was petitioned for, and the Boston Elevated Railway Company undertook to secure the right to build that subway and also the Cambridge street subway at its own expense, and to own them practically in perpetuity and also to secure an extension of the lease of the existing subway for another term of twenty years—that is, until 1937. This effort of the Elevated Railway Company was vigorously opposed by the people as leading to a surrender by the people of their control of transportation in the Metropolitan District.

After a contest conducted throughout the legislatures of 1900, 1901 and 1902, the Railway Company was obliged to yield substantially every point to the demands of the people, and finally assented to the passage of an act which provided for construction of one or more subways by the city, to be leased to the Elevated Railway Company for a term not exceeding twenty-five years, at a rental of four and one-half per cent. upon its cost. In this long struggle the Public Franchise League and the Associated Board of Trade took the leading part, on behalf of the people.

Boston has thus, it is believed, established conclusively the policy of retaining control of its transportation system, and also of securing co-operation (although at present but a small one) for the use of its streets by railway corporations. Boston will own all the subways, which are the connecting links in both the elevated and surface systems through the heart of the city. Without these subways, no practical elevated system is possible, and no surface system could be successfully operated. So long as Boston retains this ownership and the right to revoke surface locations, the city will control the transportation system and will have power to compel the corporations to pay what may seem from time to time adequate compensation for the use of the streets.

## CITY OWNERSHIP OF WATER SUPPLY.

BY WILLIAM R. HILL.

To this assemblage facts rather than didactic principles cannot fail to be more instructive and at the same time more interesting. So I shall read you to-day a few pages of the municipal history of one of our comparatively small cities.

Until the year 1892 the water works of Syracuse were owned by a private company, perhaps the poorest and most inadequate supply of water of any city in this country. The water furnished was unfit for any purpose except for flushing sewers and extinguishing fires. With an aggregate of two hundred miles of streets, there were but forty-two miles of water mains. Because of this condition all public improvements were at a standstill; there was scarcely a mile of paved streets and many wards of the city were almost devoid of sewers. The question of a better supply of water had kept the people in a turmoil for at least twenty years.

Owing to the efforts of a few determined men, a law was enacted in 1888, providing for the appointment of a commission to investigate and report upon the best source of water supply. The commissioners were divided in their views, each favoring a different source of supply, but to the everlasting credit of these gentlemen, they approached the problem in a highly patriotic and sagacious spirit. They wisely determined that the water selected should be of the best quality obtainable. They agreed that the municipality's resources were sufficient to permit the construction of works capable of meeting the naturally increasing demands of at least twenty years to come. They resolved that the works should be constructed in a strong and substantial manner, to avoid the annoyance of making frequent repairs and to guard against the constant loss of water due to leakage, thus reducing to a minimum the cost of maintenance. They employed engineers, chemists and other experts, and after listening to arguments presented by many delegations, and after making a most thorough investigation, they were unanimous in recommending Skaneateles Lake.

This body of water is located 19 miles in a southwesterly direction



from Syracuse and at an elevation of 466 feet above the Syracuse level of the Erie Canal. The lake is fifteen miles long and generally about one mile wide with an area of  $12\frac{3}{4}$  square miles. Its greatest depth is about 350 feet, and its shores are bold and free from vegetable growth. The water is remarkable for its clearness and good quality.

The questions of municipal ownership and Skaneateles Lake as a source of supply were decided by a special election, resulting in a favorable vote in a ratio of twelve to one. In 1889 a law was enacted permitting the city to use Skaneateles Lake as a source of supply, providing, however, that consent first be obtained from the Canal Board, as the lake was used as a feeder of the Erie Canal. Application made to that Board was met by strong opposition from the canal interests throughout the State, from the water company and from parties interested in having the city supplied from other sources. After protracted hearings the application was relegated by the Canal Board to the legislature of 1890. There the contest was renewed, but on the last day of the session a law was enacted permitting the city to use Skaneateles Lake. But opposition still continued, as suits were instituted to prevent the city from disposing of its bonds. Finally the court of appeals held the law was constitutional.

Negotiations with the water company for the purchase of its plant were carried on until it was determined that a price could not be agreed upon. Consequently the property was obtained by condemnation proceedings, and the award of the appraisers was accepted by both parties, although the amount, \$850,000, was far in excess of what it would have cost to duplicate the old system. On the outlet of Skaneateles Lake there are many valuable water powers which operated numerous mills and factories. These had also to be acquired at great expense.

The work of constructing the new system commenced in the spring of 1892, and with it came renewed opposition, which was finally overcome and the work completed. The available storage capacity of the lake was increased by lowering the bed of the outlet and by constructing a higher dam. A distributing reservoir was located within the limits of the city which has a capacity of 121,000,000 gallons. The aggregate cost of all the work was almost identical with the preliminary estimates, the total expenditure being less than one per cent. in excess.

On the 3d of July, 1894, water reached the city from Skaneateles Lake. The city progressed almost at a bound. Streets were graded

and paved, buildings improved, the lawns graded and sodded and many parks laid out. The sanitary condition of the city was greatly improved by the construction of many sewers and the introduction of modern systems of plumbing. The rate of mortality, which for the six years prior had averaged 16.89 per thousand, immediately after the introduction of Skaneateles Lake water fell to 13.91 per thousand, while during the last seven years it has averaged but 13.1. The importance of this can properly be appreciated by the statement that about 4,000 more deaths would have occurred in Syracuse since 1894 if the death rate that prevailed prior to the using of Skaneateles Lake water had been maintained.

The work has proved a great success financially. The department has been administered in a businesslike manner and has been kept free from political influences. In May, 1896, the assessment for water drawn from faucets for each family at fixed rates was reduced from \$10 to \$5 per annum, and a general reduction of 10 per cent. was made for water from meters. In 1898 a further reduction of 20 per cent. was made in the meter rates. The minimum annual rate was fixed at \$5, with an allowance of 27,000 gallons of water. Accordingly the people are supplied with water at rates that will compare favorably with the lowest in the country.

Prior to the municipal ownership of the water works, the city was charged \$26,000 per annum for water for municipal use, which was equivalent to a rate of about \$55 for each fire hydrant. This rate was reduced, and in 1900 the charge was entirely abolished. The water company charged for all labor and materials furnished in tapping the mains and laying the service pipe to the curb line; under municipal ownership the people have been relieved of this expense. In the first seven years of municipal ownership the income of the water department has been sufficient to pay the interest on the total cost of the works, the operating and maintaining expenses, besides making an expenditure of \$320,000 in permanent construction.

As an illustration that the department was kept free from political influences, in 1898 seven miles of water mains were laid by labor employed by the department, resulting in a saving of 15 per cent. of the cost under the contract system, besides giving employment to home laborers at \$1.50 per day, the contractors having employed foreign laborers, paying them but \$1.10 per day.

In the construction of the works great care was taken to insure proper protection against fire. A pressure of about 95 pounds per square inch was secured in the distributing mains, which are of ample size to distribute water to meet the demands for general use with but little loss of pressure due to friction. Thus a large quantity of water is always available for use, close at hand, affording a steady pressure at all times. Fire hydrants were located at close intervals, two being placed at corners of intersecting streets in a business locality or in the vicinity of large buildings, with a general average of 15 hydrants to a mile of pipe.

In the year 1897 the owners of property in Syracuse were paying an aggregate of \$600,000 per annum for fire insurance. But at once, because of the excellent protection against fire, afforded by their improved water system, an average reduction of 25 per cent. was made in the rates charged for fire insurance, resulting in a saving of about \$150,000 per annum, while the interest on the bonded debt of \$4,000,000, the combined cost of purchasing the water company's plant and installing the new water system, was but \$137,500 per annum. Thus the value of a proper protection against fire is made apparent.

The importance of the inspection of water pipes during every stage of their manufacture, both as to the quality of the metal and the perfection of the castings, was kept to the front, in fact, 25 per cent. of the pipe manufactured for the conduit line were rejected as being defective. The joints of the pipes, both of the conduit line and of the distributing system, were tested by water pressure and the leaks which were thus found were corrected before the trench was filled. Thus were reduced to a minimum the necessity, expense and annoyance of tearing up the streets to make repairs, and so the constant loss of water due to leakage was avoided which would have otherwise caused damage to adjacent property. For the same reasons great care was exercised in making all service connections.

As an illustration of proper construction and careful inspection, I would mention the fact that all the structures at Skaneateles Lake as well as the conduit line and the distributing reservoir have been built in so strong and substantial a manner that as far as is known no leaks have occurred. Indeed, when the water was first turned into the conduit, no weakness whatever developed along the whole line, and the gates at the lake have never been closed since they were first opened.

In fact, not a penny has been expended in making repairs or remodeling since they were put in use nine years ago.

The law permitting Syracuse to use Skaneateles Lake water contained a proviso that the pipe from the lake to the city should be but 30 inches in diameter. Hence the supply is restricted to the carrying capacity of the pipe, which is between 14 and 15 millions gallons per day. Because of this limited supply it was necessary to take every precaution to prevent the waste of water. Here comes in what should be regarded as one of the most important municipal matters of to-day: the use of water meters. In March, 1893, 148 meters were set, and in April the average quantity of water passing through each meter was 65,700 gallons. The charges for water by meter rates went into effect on May 1; then the quantity of water passing through the meters was so greatly lessened that in the month of April of the following year an average of but 18,400 gallons passed through each meter, showing a saving of 72 per cent. of the quantity of water used before meter rates were charged, and yet abundantly supplying all the required purposes.

The great importance to municipalities of metering water will, I trust, be sufficiently recognized to pardon my digressing from the general historical scope of this paper in order to present, in closing, certain facts which I have collected bearing on this subject. In one hundred cities in the United States, having an aggregate population of eleven millions, the average consumption of water per day is 1,457,000,000 gallons, which is equivalent to 132.5 gallons per day for each person. In these cities there are 1,531,500 taps or service pipes and 283,554 meters in use; hence 18½ per cent. of these service pipes are metered.

In order to show the effect of the use of meters on the quantity of water consumed per person per day, I have divided the one hundred cities into five classes. In Class A are the cities having less than 10 per cent. of their service metered. There are forty-one cities in this class, and their average consumption of water per capita per day is 162 gallons.

#### CLASS A.

There are 41 cities\* in this class having an  
aggregate population of.....

6,150,000

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\* Following are the cities of this class: Allegheny, Pa.; Allentown, Pa.; Altoona, Pa.; Auburn, N. Y.; Baltimore, Md.; Binghamton, N. Y.; Bridgeport, Conn.; Buffalo, N. Y.; Cincinnati, Ohio; Cleveland, Ohio; Camden, N. J.; Charleston, S. C.; Detroit, Mich.; Erie, Pa.; Easton, Pa.; Evansville, Indiana; Galveston, Texas; Gloucester,

Total consumption of water per day.....	996,400,000 gallons.
Consumption per capita per day.....	162 "
Number of services.....	930,000
Number of meters.....	31,000
3½ per cent. of services metered.	

In Class B are the cities having from 10 to 30 per cent. of their service metered. There are twenty cities in this class and their average consumption of water per capita per day is 127 gallons.

## CLASS B.

There are 20 cities* in this class having an aggregate population of.....		1,461,000
Total consumption of water per day.....	185,000,000 gallons.	
Consumption per capita per day.....	127	"
Number of services.....	190,067	
Number of meters.....	22,502	
11 8-10 per cent. of services metered.		

In Class C are the cities having from 30 to 50 per cent. of their service metered. There are 18 cities in this class and their average consumption of water per capita per day is 96 gallons.

## CLASS C.

The 18 cities† in this class have an aggregate population of.....		1,759,000
Total consumption of water per day.....	168,000,000 gallons.	
Consumption per capita per day.....	96	"
Number of services.....	220,714	
Number of meters.....	78,700	
35.6 per cent. of service metered.		

Mass.; Holyoke, Mass.; Indianapolis, Ind.; Kingston, N. Y.; Lancaster, Pa.; Mobile, Ala.; New Haven, Conn.; New Orleans, La.; Norfolk, Va.; New Britain, Conn.; Pittsburgh, Pa.; Portland, O.; Peoria, Ill.; Philadelphia, Pa.; Reading, Pa.; Salem, Mass.; Salt Lake City, U.; San Antonio, Texas; South Bend, Ind.; Springfield, Ill.; St. Louis, Mo.; Superior, Wis.; Williamsport, Pa.; Wilmington, Del.

\*The following are the cities in this class: Akron, Ohio; Cambridge, Mass.; Cedar Rapids, Iowa; Elmira, N. Y.; Grand Rapids, Mich.; Haverhill, Mass.; Jackson, Mich.; Jersey City, N. J.; Joliet, Ill.; Knoxville, Tenn.; Lynn, Mass.; McKeesport, Pa.; New Bedford, Mass.; Newport, Ky.; Paterson, N. J.; Spokane, Wash.; Seattle, Washington; Schenectady, N. Y.; Terre Haute, Ind.; Washington, D. C.

†Following are the cities in this class: Bay City, Mich.; Columbus, Ohio; Davenport, I.; Duluth, Minn.; Fort Worth, Texas; Harrisburg, Pa.; Jacksonville, Fla.; Minneapolis, Minn.; Newark, N. J.; Nashville, Tenn.; Quincy, Ill.; Rochester, N. Y.; Richmond, Va.; Springfield, Mass.; St. Paul, Minn.; Syracuse, N. Y.; Toledo, O.; Taunton, Mass.

In Class D are the cities having from 50 to 75 per cent. of their service metered. There are 9 cities in this class and their average consumption of water per capita per day is 75 gallons.

#### CLASS D.

The 9 cities* in this class have an aggregate population of .....	768,000
Total consumption of water per day.....	57,600,000 gallons.
Consumption per capita per day.....	75 "
Number of services.....	100,119
Number of meters.....	68,352
68 per cent. of service metered.	

In Class E are the cities having from 75 to 100 per cent. of their service metered. There are twelve cities in this class, and their average consumption of water per capita per day is 58 gallons.

#### CLASS E.

The 12 cities† in this class have an aggregate population of .....	862,000
Total consumption of water per day.....	50,000,000 gallons.
Consumption per capita.....	58 "
Number of services.....	90,600
Number of meters.....	83,000
91 6-10 per cent. of services metered.	

Ninety of the above-named cities procure their supply of water by pumping, the cost of which is one of the principal items of expense.

In Allegheny, Pa., where they have scarcely any meters in use, the consumption per capita per day is 300 gallons, while in Brockton, Mass., where 83 per cent. of their service is metered, the consumption per capita per day is but 30 gallons. Thus it is apparent that the effect of the use of meters is to greatly reduce the consumption of water, or, more properly it might be styled, the waste of water.

In a report of the bureau of water of Buffalo, N. Y., it is stated that on February 10, 1899, when a zero wave prevailed, the amount of water delivered per capita was 440 gallons. A large quantity of

\* Following are the cities in this class: Battle Creek, Mich.; Des Moines, Iowa; Fitchburg, Mass.; Hartford, Conn.; Lowell, Mass.; Manchester, N. H.; Milwaukee, Wis.; Pawtucket, R. I.; Sioux City, Ia.

† Following are the cities in this class: Atlanta, Ga.; Atlantic City, N. J.; Brockton, Mass.; Covington, Ky.; Fall River, Mass.; Lawrence, Mass.; Lexington, Ky.; Providence, R. I.; Utica, N. Y.; Worcester, Mass.; Woonsocket, R. I.; Yonkers, N. Y.



this was evidently allowed to run to waste to prevent it from freezing in the pipes. About two per cent. of their service is metered, and their average consumption of water per capita per day is about 265 gallons.

Furnishing water at fixed rates regardless of the quantity consumed is wrong, unjust, unbusinesslike and against the interests of any municipality. Under such a system the rates charged are mere guesswork, and many are compelled to pay for the water used or wasted by others. People are apt to complain of the general tax rate, and yet without the use of meters they neglect to curb their own wasteful tendencies in allowing water to leak from defective plumbing.

The great advantages derived from the use of meters are no longer questions of doubt. It has been fully demonstrated by many object lessons that their use will produce the following results: They will prevent money from being expended in procuring, pumping and distributing a large quantity of water the greater part of which is frequently allowed to run to waste. They will insure cheaper water rates to the public generally. They will establish an equitable basis for the assessment of water charges. In some instances they will decrease the quantity of water to be filtered, thereby increasing the efficiency of filtering plants and improving the quality of the water. They will increase the pressure on the distributing system, thus bettering the protection against fire, and they will, in many cases, where water is furnished at fixed rates, eliminate the necessity of increasing the supply or enlarging the works.

## HOW SHOULD PUBLIC SERVICE CORPORATIONS BE CONTROLLED.

BY CHARLTON T. LEWIS.

Owing to an unfortunate misunderstanding as to the subject on which I was to speak to you this morning, I am less ready than I could wish. I had prepared a somewhat elaborate paper for you, which cheerfully I suppress, so that you are relieved from that infliction, and I shall proceed to address myself in a few words to the question which has just been stated by your chairman.

This question, however, you will observe, is not at all one which comes within the field covered by your discussions these last two days so far as I can judge from reports. Those discussions have been upon economical grounds. The question which we are to take up this morning is not an economical question at all, but a question of constructive statesmanship; I shall treat it as such, and endeavor to suggest to you the principles upon which, as it seems to me, it ought to be considered. I trust that on these fundamental principles which are at the same time the principles of democratic government, there will be little dispute among us.

### Control Needed.

"How shall public service corporations be controlled?" The first inquiry suggested by this problem is, what control do public service corporations need? All admit that every citizen and every corporation, which is a part of the community, requires some degree of supervision and of control. That is to say that every citizen and every corporation must be prevented from encroaching upon the rights of other citizens and other corporations. Its actions and conduct must be kept within limits which the law has prescribed as socially right and necessary. In what respect do public service corporations, then, differ from other corporations or other citizens—for they, too, are citizens before the law—in requiring special supervision and control which is not necessary in the case of others?

Doubtless an answer to this question has been given and often reiterated in this gathering. Public service corporations are said to enjoy a monopoly of some franchise, by virtue of which, to whatever extent it goes, they are enabled, if they will, and are tempted to act for their own advantage and to the prejudice of society at large. In the first place they may neglect the public service, not making it so good as it ought to be. In the second place they may oppress the public by exacting too high prices for the service. These are the two dangers which lie in the very nature of such corporations, and which therefore require special supervision and control. The problem is how to prevent the danger of inefficient service and the danger of excessive charges when there is no competition which will automatically make it for their own advantage to give the best service at a fair price. Let these two dangers be entirely removed and there will be nothing left in the nature of these corporations, or in their relations to the community, to require other regulation than that common to all citizens.

#### **What Authority should Exercise Control.**

The second question which arises is by whom must the necessary supervision and control be exercised? What agency is competent, in behalf of the community, to prevent these public service corporations from being negligent and inefficient in their service and from exacting too great a reward for it? There is but one agency known to civilization by which such control can be efficiently exercised, and that is, of course, civil government, in one of its forms or branches.

Our special inquiry this morning relates to municipal government, and illustrations from other governments are pertinent only as far as there is analogy between them and those of our municipalities. But as a political principle of universal application, it is government, as the embodiment of public opinion and of the force which it commands, as the agency in which the virtue and the intelligence of the community are expressed and are put into action, which must control these corporations. Now, every municipality is a branch of civil government, an arm of the state, deriving its powers from the people through the state. If we believe in popular government at all, then it requires no argument to prove that when a franchise is granted by the city or enjoyed within the city, supervision and control over it should, as far as is feasible, be vested in the municipal government. The question faces

us how far, under the present conditions of our democratic society, are our municipal governments fit to exercise supervision and control over such corporations.

Now, ideally, upon the democratic theory of government, our municipal corporations ought to be the agencies most fit to exercise such supervision and control, because upon that theory the virtue and intelligence of the community express themselves in the municipal government under the tremendous stimulus of self interest. Every citizen, unless he be a professional and habitual enemy of society itself, has a direct and supreme interest in the protection of his life, of his liberty, of his property rights and other conditions of his pursuit of happiness, and for this purpose government is instituted among men. The municipal government established and empowered to fulfill this purpose, if it be the expression of the virtue and intelligence of the community, is surely the very agency to control and regulate such corporations and to prevent the evils and dangers incident to their operation. Are our city corporations able to do it?

#### **Elections should be Simplified.**

We note that the justification of democracy lies solely in the assumption that the community will make its government the expression of its wisdom and virtue. Assuming this and that the objects of government are those which are specified in the Declaration of Independence, every citizen has a supreme and equal interest in them, and it becomes his duty and rightful privilege to share in selecting its officers and directing its policy; and upon all proper occasions to contribute his thought, his ability and his industry to this work. This is the theory of democratic government, and as long as government is kept to its purpose, as long as it is distinctly and exclusively directed to these high objects for which it is constituted, so long is the theory of democratic government justified. In other words, as long as your city government has for its supreme exclusive object the preservation of civil order, the protection of property rights, the guarantee to every citizen of the privilege of pursuing his lawful business and desire and working out for himself his own destiny, as long as its single aim is to enable each citizen to make the best he can of himself for himself and his family, so long is our social organization wisely and justly founded on democratic and universal suffrage.

But the essential condition of success in securing this character to our government is that when citizens are called on to select the agency through whom its powers shall be exercised, every question which is submitted to the ballot shall be presented with the utmost possible simplicity. Whenever an election shall take place affecting this government in any way, the issue between candidates or parties or policies must be distinctly and clearly drawn, so that every citizen can understand it, otherwise his vote is worthless, if not dangerous. If you submit to the voter questions on which expert minds cannot agree, questions on which scientists differ, questions on which the professional mind of the age is at work and is groping for light, questions, definite knowledge as to which has not yet been anywhere secured, no wise decision can be expected. Of the integrity and ability of well known public men, and of broad questions of policy, especially those which involve moral considerations or large interests of the whole community, an intelligent and patriotic judgment may reasonably be asked from universal suffrage. But if questions of business management, which require a scientific or expert knowledge and training, are brought before the public, it is simply to impose upon them a burden which they cannot wisely discharge. The judgment of one man will often outweigh the judgment of a million.

In such a case the best that can be hoped is that the citizens may be able to select officers to decide such questions. Not that they can discern and select experts, but they can select honest and capable citizens capable of finding the experts. The work of the suffrage should be confined to this. In the last analysis the whole work of the voter at the polls is in the selection of men to administer the city government. When you can fix the attention of the people closely on the selection of the best men for the government you may hope to get results of value. But if you bring before the voter questions which require profound study of business, of history or of science in any form, you merely confuse his mind and destroy the value of his judgment. If anything else than the selection of competent public servants is submitted to his decision, the very basis of our institutions and the value of the suffrage itself throughout the land is impaired.

#### **Governments Divested of Business.**

This being understood, the question arises how civic government in the city can be made the proper agency for regulating corporations

which enjoy public franchises. It is evident in principle that there is but one way in which it is possible, and that is by stripping the city government of all functions except the true purpose of government.

Now, we are all familiar with these fundamental principles of democratic government. But there are in our age and among us men, chiefly of foreign birth, who have gone so far astray from the elementary principles of government as to overlook entirely its basis in the suffrage, and to regard it as a paternal system which can rightfully undertake to do for citizens what the citizens might do for themselves; to take in hand any enterprise or business which requires the association of a large number of citizens or a large investment of capital.

Hence propositions on every side that the government shall go into many forms of business, and many of these propositions are passing into actual experiments. Yet I do not think that this perversion of the basis of democratic institutions has gone so far that it is necessary to argue at length to you on the general question. In other countries, however, especially in Great Britain, a wave of insanity has gone over the cities which amazes every true democratic thinker, and which, if it should not be checked, must imperil the traditions, the liberties and the civil spirit of the English people.

We get extraordinary tidings from England. We learn that something like \$2,000,000,000 have been invested by the municipalities in different forms of business, ship canals, railways, gas, electric light and power, cemeteries, tenement houses, hotels, golf links, oyster fisheries, laundries, milk shops; that one of their cities is running a race course, one has opened a concert hall and a variety show, and so on and through an extensive range of what were formerly private enterprises. It is reputed that the net profits obtained last year from these municipal operations, according to their own reports, which undoubtedly put the best face on everything, was something like one per cent. on the aggregate investment. Two thousand millions of dollars taken from active employment by private citizens in their own industries! No well informed economist will maintain that during the last three years this sum would have earned less each year than ten per cent. in private industries. Two thousand millions of dollars made productive to the extent of one per cent. by municipal management, and this is pointed to as a magnificent vindication of the system by which municipalities engage in general business.



## - American and Foreign Systems Contrasted.

But the pecuniary loss, the stupendous waste thus produced is to my mind insignificant in comparison with other and worse consequences of this perversion of government. Therefore I am glad in the interest of civilization to see that a serious check has been put within the last few months by reflection and experience on this wild course of the cities of Great Britain. It will not surely occur to any sane mind that such a system could be adopted by the municipalities of the United States. Even were the investments made by British cities a complete success, they would afford no argument in favor of imitation by us.

The organization called a city or town in England is not what we call a city in the United States. There is no resemblance; the civic entity is entirely different. There the city has what we call household suffrage. Every man who pays taxes up to a certain amount is a voter. Here we have universal suffrage, and the difference is a vitally weak point in every proposition for municipal business. Here every man is a voter. But in this city, for instance, less than one-twentieth of the voters are owners of real estate and actual direct taxpayers or contributors to the city government. We have on the other hand more than twenty times this number, equal voters, each one having his equal will with the largest taxpayer in determining what moneys shall be collected in taxes and how they shall be expended. It is true that the taxes in the end diffuse themselves, and in the form of rent and prices for goods and service, burden the whole people. But this is not obvious to the ordinary voter, and the system which apparently and superficially makes it his interest to support a bad government is intolerable. The number of people whose pockets are not directly interested in economical and productive governments is several times as large as the number of people who are direct contributors to the city treasury. Even the number who in some way, by wages or contracts or favors, directly or indirectly profit by extravagance and corruption is larger than the number who pay the city taxes. Thus already we are bribing masses of voters to vote for corrupt and spendthrift rulers and against rational reform. We are making a larger and a larger number of voters whose direct interest it is to encourage extravagance and corruption. We build up an increasing body, whose interest it is to tax and oppress and rifle the property-owners for the benefit of men who are irresponsible. The system itself fosters and strengthens

organizations, falsely claiming a political character, whose whole being rests on the cohesive power of public plunder.

While this is the case, the efforts of reformers to secure a pure and efficient administration are fitful and their results transitory. The progress made during the last six years has been but a beginning, and its best results are in danger now. It is a fact known to every citizen of New York in this room that men who were put in office many years ago for the protection of the rights, the virtue and the morality of the community, and who have been proved to the satisfaction of the public to use their offices to sell license for crime and immorality, to corrupt the citizens and destroy the good fame of New York, remain in office still. To this point of degradation have we come, and our difficulties in escaping from it grow more obvious every day. Yet men professing to be sane are asking us to put ever larger and greater interests in the hands of an agency which has proved unworthy and helpless.

There is no such city government as ours in Europe. In Prussia there are cities where two per cent. of the people cast one-third of the vote, the suffrage being everywhere proportioned in weight to the extent of the contributions by the voter to the public revenues. In England, with its household suffrage, citizens who have no stake in the property have no voice in its taxation and administration. Such restrictions on the right of suffrage are inconsistent with our theory of government and with the habits of thought and broadening traditions of our political life. They are absolutely necessary if government is made a business agency; yet they are impossible if popular self government is to be preserved. The only solution of the difficulty is to confine government to its work of governing; to free it to the utmost extent possible from the complications and responsibilities of business management.

#### True Purpose of Government.

If time permitted I could enforce this principal by a series of historical proofs. It is a general law of human society, established by long and unvarying experience, that whenever government undertakes business management and conducts enterprises for gain, its character is perverted, its proper purposes are obscured and confounded, the commercial spirit takes the place of the spirit of statesmanship, and the way is opened to corruption. It is the business aims and conduct of governments that make its control the goal of avarice and greed. The

decline of statesmanship in our national government began with the ascendant influence of tariff legislation, making the control of Congress a great prize for capital, and reducing our highest political powers to agencies for money-makers. Every enlargement of the scope of business enterprise in government hands, whether in nation, in state, or in city, has increased the irresistible temptation of commercialism to seize political power, and has strengthened its ability to degrade the ideal of national authority and the standard of national morality. In the city, as in every political organization, a fundamental condition of the purity and value of its government is the utmost possible freedom from commercial management and responsibility.

But without attempting to discuss this subject at length, I must content myself with this statement of the principles which control it and turn for a moment to the constructive branch of our question. How shall public service corporations be controlled? Evidently not in the manner in which we have attempted to govern them. No honest and systematic effort has yet been made to govern and control them in accordance with Democratic principles. On the contrary, men calling themselves reformers have actively led the way in corrupting and degrading government by mixing it with the administration of business for which it was never designed or fitted, and with which it cannot be mixed without confounding and impairing its true ends. The first duty, then, if we would bring every corporation holding a public franchise under proper and complete regulation for the public good, is to bring back the government to its proper work. There has been much excellent work done in the United States in the conduct by the general government of the post office, and in the city, by its management of water-works, docks and piers, but these successes will prove the most pernicious influences in our history if they are taken as representing a principle, as instances of proper government work, instead of being recognized as exceptions to principle, only to be justified by special and extraordinary necessity. All these public works and services together, valuable as they may be, are doing vastly more harm than good if they are to destroy, in the popular mind, the true sense of the office and duty of government.

This office and duty is supervision, is control, is to embody and enforce the highest ideals of law and justice, and then let enterprise and industry take their course within the bounds of law. The only

branch of our government which commands the full respect and confidence of the people is the Judiciary, simply because it is the only branch which has never as a whole, or to a large extent, been corrupted and degraded by mixing its purposes with business management. If we could strip our government utterly of business ventures and interests, and confine it closely to its proper functions, every branch of it would soon command the same respect and confidence which are now given to the judiciary, and which were given in a great measure to executive officers and legislative bodies in nation, state and city a century ago.

#### **Perversion of Our Government.**

Now the power of government, in a democracy, depends upon the degree in which it is respected and trusted by the citizens. If it is the supreme expression of their virtue and intelligence, embodied in worthy representatives, it will easily control and hold within the limits prescribed by the public welfare every agency in its jurisdiction. Let the city government have the one simple task of preventing every trespass upon the community, and it will speedily develop ease and efficiency in accomplishing the task. For this purpose it must superintend and control everybody and everything in the city. It must know no difference of privilege or license to the prejudice of the community between the greatest corporation and the poorest citizen. But supervision and regulation are one thing; management is another; and any union or confusion of the two functions is ruinous to both. The public corporation must, for the sake of society at large, be supreme over all private corporations and tradesmen in its territory, but where it stoops to do the work of a private corporation or tradesman, it sacrifices its special dignity and character, and is naturally regarded by all other private corporations and tradesmen as but an overgrown competitor. The community at large wholly forgets the reverence due to it as the embodiment of law, justice and freedom, and looks jealously and suspiciously on it as a business agency. To the extent to which this cramping harness is thrown off will its energies be directed to its proper work.

#### **Kind of Control Suggested.**

The special need for control of certain corporations above others arises, as we have seen, from the fact that they enjoy monopolies, and if left to themselves may profit by rendering poor service at high cost.

The people have a right, wherever a public franchise is used, to the best service at a fair price. Nothing can be simpler than the control which will effect this result if the problem be taken up at the start. Let the franchise be granted only on conditions which secure it; and let the government, having no other end in view than the public welfare, enforce the conditions. It would be a tedious task to specify, for every branch of public service, the particular conditions needed; but the conduct of the business without encroaching on private rights, the supply of the best material and accommodations, the adoption of new devices and improvements, the limitation of prices, with the right to require the revision of them at proper intervals, and the reservation of damages to the public for any breach of duty, to be assessed summarily by an expert and impartial tribunal, are among the most obvious conditions to be always imposed. Further, whenever the exclusive use of public property is granted for any business purpose, the ultimate ownership must of course remain in the local government, and the rental for its occupation should be fixed by open and free competition, after ample notice, and for reasonable terms, long enough to encourage enterprise, but not so long as to deprive the community of the benefit of its own growth for generations to come. Simple and obvious as these regulations are, it is as certain that if adopted and enforced they would be sufficient, as it is that they have never had a fair trial.

Why has there been no such trial? Why is it that in no great city has a rational system of regulation for public franchises ever been put into effect? Simply because the energy and thought and political activity which ought to have brought it into being have been misdirected. Much of it of late has gone into efforts to centre in the city the management of such franchises, and the public spirit and intelligence have been confused by such efforts until they have largely lost sight of the meaning and use of government. But if there has been no proper control of public service corporations, the source of the evil is to be sought in the city government, rather than in the companies. Not by destroying the business of citizens, suppressing their enterprise and superseding their activities, one by one, whether they be individuals or corporations, is the public service to be reformed, but by establishing an efficient and wise government. This work of control and supervision is absolutely essential; society will fall into disorder without it. If our government is not strong enough and pure enough to do it, the

strength and purity needed will not be infused into it by requiring it to do, besides all its proper work of government, that of business corporations, too.

#### First Steps.

The first step then towards the control of such corporations is to simplify the functions of government, relieving it of all duties not essential to the work of governing. The next is to simplify the functions of the voter, in whom is vested the ultimate power of government. As long as he goes to the polls to find a wilderness of names, on a large variety of tickets, spread before him by political organizations, and has to choose among them by their party labels, with no real knowledge of the candidates or of their backers, his vote is meaningless and worthless. The practice inevitably leads to a system by which office becomes the prize for which rival bosses or rival conspiracies of professional politicians contend. The places of honor and power, which ought to be the highest in the community, fall to those who seek them for profit and exploit them with greed. To make the suffrage useful as an expression of the voter's judgment and character, and to make it of value to the community, it must be simplified to the utmost in the selection by the voters of their noblest and worthiest as rulers. This can never be done until the city government ceases, in the view of the public and in its practical workings, to be mainly a business corporation, and becomes the simple embodiment of the will and power of the community, the sovereignty of law in control of all forms and agencies of business and of life.

Is this an idle dream? I know that many of you will so regard it. But if the moral strength of the reform spirit in the land could be inspired by a clear perception of this great truth, it would be but a short time before this problem of the control of public service corporations and many other problems, no less difficult and dangerous to our political life, would find a magnificent solution. There is nothing conceivable to statesmanship that would so ennoble the republic and insure its permanent welfare as the complete divorce from commercialism of our government, whose efficiency and purity should be the highest earthly concern of every citizen.



## REGULATION AND TAXATION OF PUBLIC SERVICE CORPORATIONS.

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BY ALLEN RIPLEY FOOTE.

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Public service utilities owned and operated by private corporations should be regulated and taxed in identically the same way they would be—*they must be*—if successfully owned and operated by public corporations, such as municipalities, States or Nations.

Successful ownership and operation is the rendering of the best service at the lowest self-sustaining price. All advocates of municipal ownership favor the complete withdrawal of public service utilities from the schedules of taxable property, by placing them in the schedules of public property, not taxable. Mr. John Paul, editor of *Land Values*, a Glasgow (England) paper of imperial circulation and influence, says, "Nothing of the profits from any of the successful municipal publicly owned services are taken to reduce the taxes, nor were any of these services initiated with that view."

### Taxation, a Question of Public Policy.

If it is correct public policy to secure the best service at the lowest self-sustaining price for users, the policy regarding the taxation of the utilities, whether owned and operated by private or public corporations, should be identical. If they are taxed under private ownership they should be taxed under public ownership in exactly the same way; or, if not taxed under public ownership, they should not be taxed under private ownership. The presence or the absence of the tax should be manifest to users in the price of the service. Whether or not there shall be a tax is purely a question of local public policy which each community should be free to settle for itself. The only point to be safeguarded is, in case the policy of no taxation is adopted, to make it certain that this reduction in the cost of ownership and operation shall benefit users by a corresponding reduction in price.

**A Public Monopoly.**

Whenever a public corporation undertakes to render a public service it monopolizes the entire service within its jurisdiction. It does not permit competition with itself. It has absolute authority over its public rights-of-way, public parks, places and buildings. It can enter upon and use the same for the purposes of the service in any manner it deems best, without payment for a special grant of power or the expense of obtaining a permit from property owners or a board of public service. It avoids the wastes of competition by making possible the economies of a regulated monopoly.

Every advantage that a public corporation can acquire and utilize in these ways should benefit users in identically the same way, and to exactly the same extent, under private as under public ownership and operation. The fact of ownership should have no effect upon policy or regulation in any of these particulars. Whatever the public may, and should do, when a direct owner and operator, should be done through its agent when a private corporation is the owner and operator. Every saving made in these ways should benefit users by a corresponding reduction in price, regardless of ownership.

**Public Service Utilities should be Financed as Public Improvements.**

A public service utility is a public improvement and should be financed in identically the same manner, regardless of ownership. A very intelligent and rapidly growing school of economists declare that society has a fundamental right to all increase in values created by social conditions, precisely as a worker has a natural right to the products of his labor. A partial recognition of this right is found wherever land owners are required, by special taxation, to pay a part or all of the cost of a public improvement which gives an added value to the land they own. The cost of improvements paid by taxation is not capitalized by the public, and the use of such improvements is freely enjoyed by all of the people without direct or special charge.

Why should not this sound economic principle be applied to the construction of works for rendering public services as well as to the construction of public streets? The opening or improving of a street cannot add a greater value to abutting land, in proportion to its cost, than is added by the construction of works for rendering a public service and the extension of service lines for the benefit of users. Abut-



#### *PUBLIC CONTROL.*

ting land owners are universally assessed for the cost of sewers. This is done sometimes in the case of waterworks by assessing abutting property owners for the cost of street piping. It is not done in the case of gas or electric lighting works, or for the transmission of intelligence, or the transportation of commodities and passengers.

#### **The People have been Robbed.**

By assessing abutting land for improvement benefits, the value created by the improvement becomes the property of the public. Otherwise, it becomes the property of the owner of the land to which the value attaches. If it is permissible to use the word "robbery" in this connection, a word often applied with great bitterness to private corporations, it can be affirmed without risk of successful contradiction that, by permitting land owners to retain *all* of the values created by establishing public service utilities, the people have been robbed of vast sums, almost if not fully equaling the entire construction cost of all such utilities. This is as true of utilities owned by private as by public corporations.

#### **Capital Accounts should be Reduced by Values Created.**

Every public utility should be financed as a public improvement. A part at least of the value created by it should be assessed on the land benefited. The capital account of the utility should be reduced by this amount, and this reduction should benefit users by a corresponding reduction in price, regardless of ownership.

This is a regulation of the very highest importance. Through neglecting to apply this principle, private corporations have been compelled to buy rights of way, to pay for the privilege of using public rights of way, to pay for permits to open streets, set poles and operate cars. The public has subjected its agents to these burdens, and permitted land owners to retain *all* of the value attached to their land by reason of the improvement, while users have regarded themselves as helpless victims of an economic system which, without mercy or justice, causes the rich to grow richer and the poor to grow poorer.

By reason of the risks and capitalization made necessary by compelling private corporations to pay for increasing the value of land abutting the improvements they have made, the public has compelled users to pay a double price.

By permitting abutting land owners to retain the entire value created by the improvement of a public service utility, a free gift, the public has compelled users to pay rental on the increased value without any corresponding benefit excepting the indirect benefit of a slight increase in the assessed value of the land when scheduled for general taxation.

#### **The Environment of Custom.**

Much has been heard about the crime of giving away grants, popularly known as franchises. Why has nothing been heard of the iniquity of giving away all of the value created by public service utility improvements? It is because long established custom has made it seem right for land owners to appropriate to their own use the values created by social conditions. This custom has been decidedly to the advantage of the land owners. It has caused the people to follow a false scent. It has caused them to denounce the giving away for long terms, or perpetually, of unbought and untaxed franchises. It has caused them to grow indignant over watered stock and to completely overlook the additions made to land values for the purpose of capitalizing the increased value attached to land created by public service improvements.

#### **Error must be Corrected by Truth.**

This error in the regulation of public service utilities cannot be charged to corruption or greed. Public officials cannot be blamed for it because their action has conformed to the popular conception of right. Land owners cannot be blamed for it, because they have only accepted the gifts of value custom has for a long time given to them without question. Users of public services cannot be blamed for it, because they have been too busy, making money or earning a living in other ways, to give sufficient thought to those questions of public policy to discover how the money they were making is taken from them for the enrichment of others.

While the people are too little informed, or too much misinformed to see how conditions can be changed, without doing violence to any interest, but by being just to all interests, their case is hopeless. They must have knowledge of the truth before it can serve them. There is a world-wide effort to bring this knowledge into recognition and practical application.

**A Public Utility to be Paid for by the Values it Creates.**

The German Emperor is enamored with a project to unite the Rhine and the Elbe by a canal running through the heart of the greatest manufacturing district in Germany. Although the canal is not an assured fact, cunning speculators are active in projecting schemes to exploit the increased value of land that will be created by this great public improvement. A Land Reform League, composed of advanced economists, is bending all of its energies to the prevention of this speculation by securing legislative action which will give the increased values to the state, thus creating a fund out of which the costs of the improvement can be paid. In this way they hope not only to secure a great and direct public benefit, but also to establish a precedent which will be of incalculable value to the world.

**Accounting—Auditing—Publicity.**

To say that the accounts of all public service utilities should be kept by a system, uniform for every utility of the same class, properly designed to show the entire and true costs of ownership and operation, and that all such accounts should be audited by a public auditor, is so obviously true the statement causes people to wonder why this has never been done.

To go one step further and say that the system of accounting should be identical for *all* public service utilities, regardless of ownership, is to voice the thought of every intelligent champion of ownership and operation by private as well as by public corporations.

To declare that the people should be informed as to the true and entire cost of ownership and operation by annual comparative reports published by the state and certified as to correctness by the Auditor of State is to demand that they shall have the means of forming an intelligent judgment regarding the comparative efficiency of public and private ownership, and be in position to adopt whichever public policy, in the light of facts so ascertained, is shown to be best for the general welfare.

This is a regulation that has been too long neglected. The lack of it is costing the people of every state each year many times the expense involved in establishing the system. It is the duty of the state to first standardize the accounts of the public utilities now owned and operated by public corporations, and then to provide a way in which the

accounts of public utilities owned and operated by private corporations can be brought under an identical system. When this is done the people will enjoy the benefits to be derived from properly regulated monopolies. Until it is done the war of the uninformed and the misinformed upon these subjects of speculation and investment must continue. A war between parties willing to be just, but not knowing how.

#### Price Based on Cost.

When a correct accounting and auditing system is in force the price of service can be determined for fixed period of ten years, under conditions that will bring to users the entire benefit of low taxation, or no taxation; of reduced capitalization effected through appropriating for public use a part of the value created by each public improvement; of improved efficiency in management induced by correct and exact comparisons of results; of all improvements in the arts, general economic conditions and growth of population.

Under public ownership and operation the price should be only sufficient to pay the true and entire cost of the service. If it is less than this a deficit will be created which taxpayers must pay. If more than this a surplus will be created by which others than users who pay the bills will benefit.

Under private ownership and operation the price should be only sufficient to pay the true and entire cost of the service, *plus a reasonable profit*. All honest-minded and intelligent persons are agreed that so long as the public employ private corporations to own and operate public service utilities such corporations are justly entitled to a reasonable profit. The demand is to have it made certain that the profit earned is only reasonable. This demand will be completely satisfied by the uniform accounting regulation advocated.

#### Failure of Municipal Ownership due to Want of Regulation.

The accounting regulation is the basis upon which any intelligent regulation of charges for services rendered must rest. In the absence of this regulation all action must be guided by guessing and prejudice. There is no foundation for reason without a knowledge of the facts.

This regulation is as indispensable to successful municipal ownership and operation as it is to correct regulation of private ownership and operation.



A bill is now pending before the legislature of Indiana which presents a lesson to which the attention of all municipal ownership advocates should be drawn. It is to permit the sale to the highest bidder of a municipal electric lighting plant, a franchise for operating the plant to be granted to such bidder. *Municipal Engineering* for February, 1903, gives an account of this case, from which the representations here made are taken. The plant was constructed some years ago and was seemingly quite successful for some time. Rates for service were considered high and were lowered from time to time. It is suggested that desire for political favors from some large consumers led to fixing rates for them at specially low figures. To make a good showing for prompt collections 20 per cent. discount for prompt payment was made, even from these low rates. The result of all these bids for popular favor has been that, while the works have been operated in such a way as to pay expenses, there has been no proper provision for depreciation. A new administration finds a plant requiring thorough reconstruction and the correction of some errors in design, but finds no money with which to do the work, no credit on which to raise the money, the city's debt limit being reached, and no possibility of running the plant long enough at higher rates, admitted to be necessary, to replace the old machinery from the profits of the business. In despair at the situation, the city officials have applied to the legislature for an act to enable them to sell the plant to the highest bidder.

Enthusiasm for municipal ownership is probably at low tide in that city.

#### A Warning from Glasgow.\*

Mr. John Paul (of Glasgow, England) is a single-taxer and represents, through his paper, *Land Values*, that sentiment in Scotland, where it is very strong—even controlling the Glasgow city government. His views on the social utilities of these municipal improvements are of special interest. On this point he writes:

"Single-taxers, as such, do not attach much importance to municipal services. I have been interested at times in the visits of American single-taxers here who profess admiration for Glasgow's controlling these monopolies; and as I look at your prints advocating a similar policy for the towns of the United States I wonder, in view of our experience here, if the game is worth the candle. Whether they are controlled by private corporations or by the municipality, these services only add to rent. The conversion of the tramways from horse haulage to electricity and their extension for miles in every direction has sent up house rents one, two and three pounds a year, and, as you know, these advances in rent must be paid by all house-

\* From *The Public*, Chicago, January 24, 1903.

holders, whether they use the cars to greater or less advantage, or not at all. Of course, there is a sense in which the citizens get an advantage from some municipal improvements that the landlord cannot take from them. The children can have the enjoyment of open spaces and parks. But even these in the long run mean better health for the city, and consequently more ability to produce wealth for somebody else to enjoy.

"But to come to the more political aspect of the question. The private corporations, it is asserted, owning and controlling your municipal monopolies, or services, control and dominate your local legislatures. They bribe councillors to vote in their interest and further pollute public life by promoting the candidature of their own creatures. This is pretty bad and must make many who stand for progress at times despair.

"But look at the situation from our point of view. We have some 15,000 workers in the employment of the Glasgow Council, and every further piece of municipal expansion adds to the number. Many of these workers are organized and are exercising more and more political influence in the return of their own creatures to the Council. The candidate for their support is not the man who will look after the interests of the city, but those who will promise most to the employees of the Council. The best interests of the city is a secondary consideration. In fact, these workers cannot see the city's interest except through their own, while the more vigilant of them work for the return of candidates who will assist them or their friends into corporation jobs. A labor candidate publicly boasted on the hustings that he had got so many men municipal employment during his term of office, which means that we have Tammany here. And we are likely to have more of it in the future. This is due solely to economic pressure caused by locking up the land in the hands of a class. It is accentuated by effecting municipal progress and expenditure. Therefore, as I say, we single-taxers are not at all enthusiastic about these municipal improvements."

The above is full confirmation of what I have for many years been endeavoring, as best I could, to teach the people of this country.

The only hope for successful municipal ownership is in service regulations based upon merit only. Tenure of employment and promotion in the service should be absolutely dependent upon service record. In this way only can the lack of discipline enforced by the dictates of self-interest under private ownership be made good under public ownership. In this particular, the regulation of the two forms of ownership, while identical in principle, require different methods for bestowal of rewards for efficiency.

#### Conclusion as to Regulation.

To cause public service corporations to serve the public in the best possible manner, and render the best service at the lowest profitable price, they must be subjected to a system of regulation identical in every detail, excepting only the civil service regulation, with the system of regulation that the people must insist upon for publicly owned and operated utilities, if municipal ownership is to be successful.

Failure, in the case of private corporations, is at the expense of stockholders.

Failure, in the case of public corporations, is at the expense of taxpayers.

Rates charged by private corporations, based on cost plus a reasonable profit, will be the lowest profitable price at which private corporations can afford to render a service.

Rates charged by public corporations, fixed at cost, will be the lowest price at which public corporations can render a service without creating a deficit which taxpayers must pay.

If cost is determined in both cases by an identical method, the margin of difference in price cannot exceed the profit of the private corporation. If public waste equals corporate profit, the price at cost, plus profit, under private ownership will only equal cost under municipal ownership. The price to users in both cases will be identical.

Unless public management can be made as efficient as private management it is impossible to realize an economic gain by transferring a public service utility from private to municipal ownership.

#### State and Local Taxation.

The question of taxation will now be considered.

A search of existing systems of state and local taxation will disclose the fact that there is no satisfactory system of taxation in practical use in any state in the union. More than this is true. There is not a state in which there is a system of taxation in which sound principles are correctly applied. In many states the adoption of a simple and just system of taxation is prohibited by constitutional provisions.

It is impossible to discuss the taxation of one class of subjects without considering the general system of taxation of which it is a part.

The first fundamental principle of a simple and just system of taxation is:

*No subject should be directly taxed more than once, or by more than one taxing body.*

The application of this principle requires the separation of sources of revenue for state purposes from the sources of revenue for local purposes.

The principle that should govern the assignment of subjects of taxation as the sources of revenue for the exclusive use of a taxing body is:

*Subjects of taxation assigned to a taxing body should be such subjects as it is in the best position to deal with intelligently and justly.*

The application of this principle will give local taxing bodies exclusive jurisdiction over the taxation of property by assessed valuations, and will give to the state exclusive jurisdiction over the taxation of corporations as such.

An intelligent and just opinion as to the value of property can best be formed where it is located.

The state only has power to require the reports, to make the examination and to exercise the general supervision over corporations that is necessary to the formation of an intelligent and just opinion regarding methods of assessments and rates of taxation that should be applied to them.

This separation will at once remove the most fruitful source of dissatisfaction with existing taxation systems by taking from taxing bodies jurisdiction over subjects of taxation which they cannot tax intelligently or justly, such as the taxation of real estate by the state, and the taxation of corporations by local taxing bodies.

The principle that should govern taxation by valuation assessments is:

*All equalizations of valuation should be made within the jurisdiction of the taxing body in which the property valued is located.*

Value is and must always remain an expression of opinion only. One of the chief difficulties in attempting to legislate on the subject of taxation, or to administer the laws enacted, is found in the use of the term "value" as a concrete and invariably quantity when, in fact, it is the most intangible and variable factor in the entire problem.

The application of this principle will abolish all county and state boards of equalization and place the problem of equalization where it properly belongs, in the hands of those directly interested.

When valuations and equalizations are made exclusively within the jurisdiction of small taxing bodies, every property owner can be supplied with a published list of all property scheduled and the value put upon it. This will enable him to know how his own and all other property is valued. Having this information, and knowing the local Board of Review has final power over all questions of equalization, any property owner can make application direct to the Board and appear in person, if he so desired, to secure an equalization of any values on the list. Motives of self-interest can be depended upon to secure an equitable valuation for all property within the jurisdiction of a taxing

body. Provision should be made for an appeal to a court of competent jurisdiction in case a property owner is dissatisfied with the decision of the local Board of Review.

The principle that should govern the designation of a basis of taxation for any class of subjects is:

*The basis of taxation for every class of subjects should be concrete in character, to the exclusion of value, whenever practicable.*

The application of this principle will lead to the substitution of the income from property, for the value of property, wherever the business involved is conducted in a manner to render the exact gross receipts from the use of the property easily ascertainable.

In the light of the uncertainties and difficulties experienced in all attempts to use value as a basis of taxation, the good policy of discarding value and adopting gross receipts for all classes of property used for the purpose of a business upon which a gross receipt tax will lay a just proportion of the common burden of taxation, cannot be questioned.

#### **Flexibility Secured.**

In applying the principles thus far stated it will be observed that by excluding counties and the state from any direct share in the general property tax, they may be left without sufficient revenue. Independent subjects for county and state taxation will be found, but it is not expected, nor considered desirable, to enable counties and the state to secure their entire revenue without access to the general property tax. This access will, however, be indirect instead of direct.

For the purposes of taxation, every taxing body must be dealt with as a public corporation. Primarily, the general property tax is assigned as an exclusive source of revenue to the taxing body under the jurisdiction of which property must be scheduled and valued.

Having full jurisdiction of the general property tax each public corporation should have full power to determine for itself what kinds of property it will tax, by what rule each class of property shall be valued, and at what rate, within the limit prescribed by the legislature, it shall be assessed.

Giving this power to village, city and township governments will supply flexibility to a taxation system. It will enable each community to study the incidence of taxation at close range, and to adopt that policy which to them appears best suited to the development of their

own local conditions. The methods by which a local, public corporation derives its revenue will not be a cause of interference from any other taxing body, because no other taxing body will be affected in any way by the method, nor will have any more interest in it than in the amount raised for purely local uses, or the purposes for which it is expended.

**Gross Receipts of Public Corporations a Source of Revenue for County and State Purposes.**

Under a system of uniform public accounting, which unquestionably must be the basis of a simple and just system of taxation, the gross receipts of all local public corporations (taxing bodies) derived from taxation, and from such public service utilities as they may own and operate, will always be known with unvarying exactness. The total of such gross receipts can be made a concrete basis of taxation for county and state purposes. By this method the amounts apportioned to local taxing bodies, to make up the amounts required by county and state governments not derived from other sources, will be an indirect tax on general property valuations.

The amount of taxation levied by a community for its own purposes is a just measure of its own estimate of its ability to pay taxes.

The amount required by the state, in excess of its receipts from other sources, can be apportioned to the counties on the basis of the gross receipts of each. The amount required by each county in excess of its receipts from other sources, including its share of the state requirement, can be apportioned to each local taxing body on the basis of its gross receipts. To the amount required for local purposes each local taxing body can add the amount apportioned to it by the county. As the local revenue will be derived from the general property tax, this will make the requirements for county and state purposes an indirect burden on the local property valuation, it will be apportioned on the basis of local gross receipts. By means of this change, county and state boards of equalization can be abolished, and a simple and just system of taxation established, from which most of the evils now complained of will be eliminated.

**Gross Receipts an Identical Basis for Taxation of all Public Service Corporations.**

All taxing bodies are public service corporations. All private corporations owning and operating public service utilities are public ser-



vice corporations. The gross receipts of each public service corporation furnishes an identical basis of taxation that can be used with equal justice to the exclusion of all taxation based on valuation.

The state is the only taxing body possessing sufficient jurisdiction in all respects to tax public service corporations intelligently and justly. It can prescribe a uniform system of accounting and reports, for all public service corporations of both classes, that will disclose the total amount of their gross receipts with unquestioned exactness. It can assess these amounts at a uniform rate with impartial justice. The entire revenue from this source can be appropriated exclusively for state purposes and will become its principal source of revenue.

This system of taxing public service corporations satisfies every requirement of simplicity and justice. It rests upon a concrete basis that will always be an undisputed fact, never the subject of an intangible and changeable opinion. It is simple, fixed, proportionate, easily ascertainable, and susceptible of ready levy.

The want of such a system is universal. It does not exist in any state. This was the condition of affairs twenty-four years ago. It is the condition now.

#### **Report of a Committee of State Railroad Commissioners.**

A report was made to a convention of state railroad commissioners held at Saratoga in 1879 by a committee consisting of C. F. Adams, Jr., of Massachusetts; W. B. Williams, of Michigan, and J. H. Oberly, of Illinois, on "Taxation of railroads and railroad securities," in which the following statements are made:

"A compendium of the systems in use in all the states of the union has been prepared. On examination of this compendium of state systems in present use in this country it will at once be observed that they are much more varied than would need be supposed, or, perhaps, than would have been thought possible. Generally, it may be said, there is no principle running through the various systems described; and, further, that there is no method of taxation possible to be devised which is not at this time applied to railroad property in some part of this country. So far as those now well-recognized principles which should be at the basis of all systems of taxation are concerned, they would, as a rule, seem to have been utterly ignored.

"The franchise tax, the gross and net earnings, the personal property tax, the realty tax, are all met with indiscriminately; applied sometimes by local boards, sometimes by boards of state equalization, but always invariably in utter disregard of principle.

"The New York State Assessors, in their annual report for 1873, expressed the opinion that there was 'no uniform rule for any road, in any county, each assessor being governed entirely by his own views.' In certain towns railroads appear to pay about one-third of the entire taxes, while the assessed valuation now (1878) varies from \$400 per mile to \$100 per rod. The difference in the assessment of the New York Central and Hudson River roads, where, for all the purposes that the road can be used, it is of the same value to the company, is \$24,000 per mile. In short, it is

scarcely an exaggeration to say that the assessments are as unlike as the complexion, temperament and disposition of the assessors.

"It does not need to be pointed out that a system such as this—and it is the system in most general use—compels the corporations, in self-defense, to an active participation in local politics. Indeed, it is not too much to say that, as a system, it is open to almost every conceivable objection.

"The requisites of a correct system of railroad taxation are that it should, in so far as it is possible, be simple, fixed, proportionate, easily ascertainable and susceptible of ready levy."

If there is any doubt as to the continuance of the chaotic condition of the taxation systems of the several states so graphically described by this able committee in 1879, such doubts will be dispelled by reading an article written by the most recent investigator, Prof. John R. Commons, Secretary, Taxation Department, National Civic Federation, published in the *American Monthly Review of Reviews*, February, 1903.

Judging by experiences such as these investigators of 1879 and 1903 report, which are common to all classes of property in all states, it is wiser for the people and for public service corporations to accept a tax based on gross receipts than to sustain the inequalities of arbitrary assessments based on arbitrary valuations.

#### The Good Policy of Taxing Public Service Corporations.

Theoretically, a correct application of sound economic principles requires that all property devoted to a public use shall not be taxed, and that all property devoted to the uses of a public service shall be classed, regardless of ownership, as devoted to a public use and not taxed.

It is true that a community can make no gain by taxing its own public property, such as city halls and parks, but it is not true that a gain cannot be made by taxing the gross receipts of a service that is sold to users on the basis of payment for the service in proportion to the use made of it. It is true that a tax on gross receipts from the sale of public services, such as are under consideration, will be inequitable if tested by the earning capacity of all persons who would be so taxed. A wage earner pays more for street car fares than his employer. His income is much less, therefore he will pay a larger share of a tax on gross receipts from street car fares than his employer, and the share paid will be a much larger per cent. of his earnings. A taxation problem, however, cannot be solved by considering but one of its many factors. It is true that a wage-earner will pay more of a tax on gross

receipts from street car fares than his employer and that the payment will be a very much larger per cent. of his earnings than will the share of the same tax paid by the employer, but it is not true that this fact proves that the wage-earner is taxed unjustly by the system of taxation considered in its entirety. There are many ways in which an employer is taxed that do not directly reach the wage-earner at all.

The burdens of taxation cannot be distributed in a way to rest with exact precision upon every individual in proportion to his ability to pay, whether this ability be measured by his property, his gross or net earnings, unless it be placed on a single subject universally used, such as land. While this is true, it is also true that it is impossible to distribute the burdens of taxation, which represent the cost of government, in a way to cause each person to pay his share in proportion to benefits received.

The person who pays least taxes usually receives a greater benefit, in proportion to the amount paid, than any other person in the community. But for the government he would be deprived of his natural rights. He would cease to be a freeman and would fall back to the condition of slavery from which he has been raised by civilized government, very little of the true and entire costs of which he has paid. In fact, his entire payment of taxes during his lifetime is infinitesimal in comparison with the price he would pay for his freedom if now enslaved.

The education of the children of wage-earners at public expense is a service worth far more to them than all the taxes they pay in any manner, directly or indirectly.

These illustrations are given to support my affirmation that it is impossible for any person, rich or poor, to use for his own benefit the amount he pays for taxes, even though the burden be not equitably distributed, in a way to secure as substantial and valuable benefits as he derives from the government for the support of which his taxes are paid. The injustice complained of cannot be that tax-payers do not receive full value for their payments, but that the service rendered is made to cost more than necessary by inefficient and wasteful management, and that the burden is not equitably distributed among all who should pay their fair share of it.

A tax on gross receipts from the sale of public services, that are paid for by users in proportion to the use made of them, will diffuse

itself through the whole body of the people as equitably and completely as any tax that can be devised. Funds collected in this manner can be used by the state in a way to return greater benefits to the people than can be obtained by them from the individual expenditure of the same amount paid by them individually, as an indirect tax, through the prices of the services they use increased by the amount of the gross receipts tax. A correct public policy, therefore, requires that a gross receipts tax be assessed upon all services sold to users, whether rendered by public or private corporations.

#### Conclusion as to Taxation.

Theoretically, the general welfare is best served by supplying public services to users at cost, when under public ownership, and at cost plus a reasonable profit, when under private ownership, *exclusive of taxation*.

Practically, the general welfare is best served by supplying public services to users at cost, or at cost plus a reasonable profit, as the case may be, *cost to include a tax on gross receipts*.

Taxation systems will be more simple and just when efforts to tax personal property are discontinued and the deficiency in revenue so caused is supplied by a gross receipts tax on public services of all kinds. Every person relieved from taxation by the exemption of personal property will pay as much indirectly—in many cases more—through a gross receipt tax on public services, than he has ever paid directly by the taxation of personal property.

In assessing a gross receipts tax but one point requires safeguarding. It must not be at a rate sufficiently high to place a local community, a state, or the nation at a disadvantage on account of the correspondingly increased costs of its services, in the irrepressible competition for commercial advantages that always exists, potential and active. For securing such advantages, public services are factors of high potency. They are the equipment that must be provided in the best form, and at the lowest profitable prices, if commercial victories are to be won in the world-wide competition of a municipality with municipalities; a state with states; a nation with nations.

## TAXATION OF FRANCHISE VALUES.

BY EDWIN R. A. SELIGMAN.

IN the first place, let us inquire how it happens that the problem of the taxation of franchises is peculiar to the United States? How does it happen that we do not hear of the difficulties of franchise taxation in England or in any of the continental countries of Europe? I can answer that query by putting a second question. When you ask a man in England how much he is worth he will say so many thousand pounds a year. He plainly refers to his income. On the other hand, ask a man in this country how much he is worth, and he will say so many thousand dollars, evidently referring to his capital. Reduced to its last analysis, this means that different countries have different methods of estimating wealth. Abroad they use the income measurement of wealth; in this country we use the capital measurement of wealth. If there were time it would be interesting to explain how this difference came about. I can at all events say this, that in the middle ages where land was the chief form of property, land was worth only what it would bring in the way of rent. It never was bought or sold. Accordingly, the rental or income valuation came to be the measure of value all over the mediaeval European world. On the other hand, when America was settled, the feudal system had already largely faded away at home. Land was soon bought and sold in the colonies as all other commodities were bought and sold. When the transfer took place, the sale was effected on the basis of its capitalized income, its property value. Consequently we have the property measurement of wealth, with the property tax, while Europe still has the income measurement of wealth, without the property tax.

So much for the chief reason why we have the problem with us as a peculiar problem. Franchises do not exist as such in the thought of any European, because corporations, like individuals, are taxed upon their entire income, not upon their property, and because income from a franchise is not differentiated from the income from the other ingredients that go to produce the earnings.

**Franchises Classified.**

Now, secondly, what is a franchise? I shall not here attempt to enter into a recondite economic description as to what a franchise actually was in the Middle Ages, or further back. For the present in New York, as well as in most of the other American cities, the word franchise is applied to three different conceptions:

First, is what the Supreme Court of the United States calls the right to become or to be. We accord to a certain number of individuals the privilege to become a corporation, to have perpetual life, to possess limited liability, and so forth. This privilege to become a corporation is often called a franchise, and some states tax this privilege and call the tax a franchise tax. In most of the states, however, it is more properly termed an incorporation fee, a charter fee or something analogous.

The second kind of franchise is the franchise, not to be, but to do—the franchise to do something, the privilege not simply to become a corporation, but to carry on business and to make money as a corporation. This is the sort of franchise which under the laws of most of our states is sought to be reached when a general corporation tax, as distinct from the charter fee, is imposed.

Finally we have in New York and a few other states a third kind of franchise—not a franchise to become, not a franchise to act, but a franchise to make use of certain special local privileges. Those franchises, or those privileges, apply specifically to our quasi-public municipal corporations, like street railways, gas companies, and so forth, and are something over and above the franchises granted to the ordinary business corporations, whether to be or to do. This is the third kind of franchise, a franchise to use the public streets of the city, to burrow beneath them, or to go above them. This particular kind of franchise is what we in New York call a special franchise. Therefore you see there are three kinds of franchises: the franchise to become, the franchise to do or to act, and the franchise to make use of certain special local privileges.

The problem to which you have asked me to address myself is connected with this third franchise; not with the first kind of franchise, nor with the second kind of franchise, but with what is known as the special franchise.



**Object of the Franchise Tax.**

We come now to the third point, namely, what is understood in this country to-day by the franchise tax, as we meet it in our courts of law. We find two great examples of a franchise tax, which differ fundamentally in their economic sense. In the one case what we call a franchise tax is simply the general tax on corporations. This is the outgrowth of the difficulty we have had in applying the general property tax to corporations. The general property tax assessed by local assessors on corporations in general or on any class of corporations in particular has proved almost everywhere a dismal failure. Therefore in order to overcome the difficulties of the general property tax most of our states impose a general tax on corporations in a little different way and call it a franchise tax. You will ask, why do they call it a franchise tax, rather than a property tax? Why is our general corporation tax in this state, for instance, called a franchise tax, although it is assessed on property? Simply because if you call a thing a franchise tax you avoid a great many difficulties which inevitably attach to it if called a property tax. For instance the Constitutions of nearly all of our states require uniform taxation of all property; consequently if corporate property is taxed as part of the general property tax you must tax the corporation in precisely the same way as an individual. But this has proved to be impracticable. Hence in order to be able to tax it in a little different way we call it a franchise tax. This illustrates the utility of legal fictions.

Second, we have in addition to the essential difficulties connected with taxation in general, the special difficulties which arise from the fact that we are living under different kinds of government, local, state and federal. Our Federal constitution imposes certain restrictions upon state taxation so far as interstate commerce is concerned. If you tax property you cannot reach the property employed in interstate commerce; but if you call the tax a franchise tax and measure the franchise by some such standard as property or gross earnings, or by any other standard, the Supreme Court of the United States holds that that system does not involve any interference with interstate commerce. Therefore the institution of the franchise tax is a method of evading certain constitutional restrictions.

I might go on and call attention to three or four more reasons why in this country our general corporation tax—the taxation on corpora-

tions in general—is often called a franchise tax, whether we levy it according to property or according to earnings, or according to stocks, or according to bonds, or according to anything else, for we have not less than fifteen or twenty different ways of taxing corporations in this country. As long as you call it a franchise tax it is all right. That is why we hear so much of general franchise taxes.

#### Nature of Franchises.

We, however, have to deal with our subject from another standpoint—from the standpoint of economic theory. We must brush aside these legal fictions and ask: What really is a franchise? The question is brought up by the fact that in many of our State constitutions and laws we find a provision that corporations shall be taxed upon their property, including franchise; or that they shall be taxed upon their property plus the franchise; or that they shall be taxed in a certain way on the franchise, irrespective of the property. What is this economic entity, this franchise which differs from the ordinarily taxed property? Perhaps we can most clearly answer the question by a few illustrations. When you buy out a corner newspaper stand, for what do you pay? Evidently not for the stock in trade, for that disappears every day. Evidently not for the stand, which is worth only a few dollars. You pay several hundred dollars for what the boys call the route; that is, the privilege of serving a definite number of customers. Again, if you buy out a business, for what do you pay? You pay for much more than the stock in trade of that business, you pay for the good will of the business. Again, when the Steel Trust was incorporated, what did it include? Simply the tangible property, the mills and all that sort of thing? No, it included a great deal more than that; it included all the established business connections and the opportunity of making profitable use of the property. Economically a franchise is nothing, but this indefinable something, this good will, this opportunity to turn the tangible property to account, to make something out of it. Hence, if you are going to measure corporate property simply in terms of tangible, visible, physical property, you have not got the whole of that company's property. You have got to add to it what in the case of a business we sometimes call the good will, but what in the case of a corporation we call the franchise. The franchise is thus an important ingredient of the property, because the income that

is earned by the corporation comes out of its whole property, its physical tangible property, plus the opportunity to use the property. This economic conception of a franchise as a separate income-yielding ingredient of property includes all the different kinds of franchises which have been developed by legal distinctions in the United States.

#### Unscientific Tax Systems.

The fourth question before us is: Why does the franchise question acquire such immense importance in New York and in many of our other cities? Why do we have a special franchise law? The answer is not difficult. Simply because our corporations are unfortunately still taxed for local purposes according to the antiquated system of the general property tax. Let us assume, for instance, that the property of a corporation is represented by its stock. In the case of personal property in this state we allow a deduction for debts. The bonds of a corporation are its debts. Therefore all you have to do in order to escape taxation is to create a bonded indebtedness a little larger than your capital stock and you have zero for your taxable valuation. For instance, suppose that the capital stock plus all the bonds amounts to one hundred million dollars; the capital stock is forty million dollars, and the bonded indebtedness sixty millions. Deduct sixty from forty and you have minus twenty million dollars, which is all that is taxable so far as personal property is concerned. Now that precise question arose in Brooklyn: The assessors attempted to tax not only the real estate of the corporation—for they did not have very much real estate—but endeavored also to tax the franchise. No, said the court, the franchise is personal property, and you have got to deduct the bonds; therefore there is really nothing to be taxed. It was this decision which led the originator of the law, who is with us to-day, Mr. Ford, to adopt the very ingenious device of calling the franchise real estate, for in New York we do not allow deduction for debts on real estate, whereas we do on personalty. In other states the condition is just the reverse, debts are often deducted in the case of realty, but not in case of personalty. This shows in what a state of chaos our whole system of taxation in this country is involved.

Now, economically, a franchise may be called real estate or it may be called personalty. It is both, and it is neither. No matter what you call it, a franchise, as I have said, is simply that indefinable some-

thing which makes your real estate, and which equally makes your tangible personal property, worth something. Economically it attaches to real estate as much as to tangible personalty.

#### Legal Questions.

We come fifthly to the question of the constitutionality of the present special franchise tax. The courts of this state has declared the tax unconstitutional because it interferes with home rule. It is not my province to criticise the decision from the legal point of view. I shall confine myself to the economic point of view, and this is the point of view of public policy. In the long run, indeed, the law is bound to follow public policy or public sentiment; law, so we are told, is nothing but crystallized justice, even though it sometimes takes a long time to crystallize. What is the economic and social aspect of the decision?

We find pretty much everywhere in this country to-day that economic conditions are outgrowing local control. We find a centralization, a growing centralization in certain kinds of administration. We find, for instance, that our hospitals are no longer managed by the cities, but are better managed by the state. We find that our schools are supported by taxes which are paid to the state, and subject to a certain kind of state supervision. It would be easy to call attention to the numerous other cases where modern conditions show that a centralization of administration is desirable. Why was it, for instance, that when we discussed this very franchise tax bill at Albany, a demand was made for this amendment which is now declared unconstitutional. Simply because it was claimed that we should receive better administration through a state board than we could hope to get through local officials, just as in general Federal taxes are more successfully administered than state taxes; just as on the whole state taxes are assessed with more success than local taxes.

Furthermore, entirely apart from this question, it is probable that with the growth of interlocal relations it will become increasingly difficult for local assessors fairly to estimate the value of corporate property or franchises. We have now in this city an inter-borough electric traction company; before long it will become an interurban company. Within a very few years many of our local traction companies will branch out and become interurban, until our street railways will go through the same development which our ordinary railways

experienced years ago. It will be almost impossible to assess the local proportion of such an inter-local franchise, just as to-day the different localities in many of our states find it impossible to say how much of the franchise of the great public railway corporations really belongs to them. Sooner or later, court decisions or not, the necessities of the case will lead to a centralized administration of inter-local functions. Franchises of the kind we are dealing with are fast outgrowing the local swaddling clothes.

#### How Franchises should be Assessed.

Finally we come to the last problem. Granting all this, the question still remains: how are you going to measure the franchise? Now, if you have followed what I have said, it is plain that there are only two possible economic methods to ascertain the value of the franchise of a corporation. You must take either the income measurement or the property measurement. If you take the property measurement you must make some sort of distinction between the tangible, physical property and the non-tangible, immaterial property. When both are lumped together, as on the stock exchange, how are we to measure the property value of a corporation? Plainly through its securities. We add the market value of the stock to the market value of the bonds. This, it is true, is not an absolutely correct measurement economically. A bond may be above par, not because it is an especially good bond, but because it bears a high rate of interest or because it has a relatively long time to run. The market value of the bonds thus does not always give an accurate idea of the real value of the property on which it is based. Again, if you take the stock there also the market valuation is not absolutely correct, because of speculative management. We know that the market value of stocks is often temporarily affected by manipulation and that it sometimes changes very rapidly. The way out of the difficulty, however, is to take the average market value during a term of say three, four or five years. This will give us the nearest approach to an accurate valuation of total property. Now if in this way you have reached the market value of the property, all that is necessary is to subtract from the total market value of the securities the value of tangible, physical property, and the remainder will be the value of the franchise. This is a simple proposition. It is just as close as we can get to the value of a franchise, regarded as property.

Suppose, however, that you can not get at the value of the securities at all, because they are not bought and sold on the exchange, what then? Then you must do what they are trying to do in Michigan to-day with the railroads. There they try to reach an estimate of franchise value by the income measurement. They first attempt to get at the value of tangible physical property, which does not involve any special difficulty. Then, in order to get at the value of the franchise or non-physical property, they take the total gross earnings from operation plus the total income from other sources. From this total gross revenue they deduct operating expenses plus five per cent. of the value of the tangible, physical property. The remainder might be called the clear earnings, which are due not to the physical property, but to something else. This remainder they capitalize, not at 5 per cent. but at 7 per cent. in order to give the corporation the benefit of the doubt. They thus arrive at the value of the franchise, or of the non-physical property. In Michigan, railways were taxed up to that time upon a gross earnings valuation ranging from  $2\frac{1}{2}$  to 5 per cent. Under the new scheme it is claimed that the valuation according to capitalized income yields at least two or three times as much. All of which shows that whether you measure property in the one way or the other, whether you estimate the franchise according to capital value or according to income value, it does not make very much difference so long as you put the tax high enough.

The important point which cannot be too strongly emphasized is that a franchise is economically something over and above the physical, tangible property, which can be measured according to capital valuation or according to income valuation. If you measure it according to capital valuation, as is the case in this state, there does not seem to be any better method than to take the security value, the value of the entire securities, and to deduct from this total the value of the tangible, physical property. The remainder will obviously be the valuation of the intangible property that is roughly called the franchise.

All market values are the capitalization of present income and of estimated future income. If you buy a house you base your purchase price not simply on the fact that this year it yields so much revenue, but on the further fact or hoped-for fact that if kept it is going to yield so much in the future. It really makes no difference whether you use the income or the property valuation, pro-



vided you put the rate high enough to accomplish the result. That after all is the real crux of the whole matter. Here we are dealing with corporations, which in some way or other have secured public privileges from the community out of which they get large returns.

The public is clearly entitled in some way to share in the privileges which are conferred upon these corporations. The special franchise tax in New York is designed to make the corporations contribute not more than their share, but simply their fair share to the public revenues. Up to this point in the history of the United States, as a matter of fact, so far as our municipal quasi-public corporations are concerned, they have been bearing in most cases less than their share. They have been taxed, not upon their entire property, but upon only a part of their property. It was to escape from this situation that the scheme of the franchise tax was devised. However much the subject may be beclouded by legal fictions, there remains a solid basis of truth. The whole object of franchise taxation is to make the quasi-public corporations assume their just quota of the public burdens.

## LABOR CLAUSES IN FRANCHISE GRANTS.

BY RAYMOND V. INGERSOLL.

Many of our economists realize that no social achievement is of more vital import than is the establishment among wage workers of a high standard of living. There are some even who see in organized efforts in this direction not only a most wholesome, though incidental, stimulation of home markets, but the securing of that wider diffusion of comfort, leisure and intelligence which forms one of the chief objects and is perhaps the only guarantee of democratic institutions.

Progress toward this goal of the labor movement has been easiest in the skilled trades. But among unskilled workmen there has been a compensating advantage in the fact that they are employed in the largest bodies either directly by the public or by public service corporations over which the body politic has some measure of control. For a vast majority of voters believe that the city and state, free from the fierce competitive struggle, should in a sense be model employers. And this conviction has gone one step further in a very general demand that business organizations which bid for public contracts, or which enjoy special franchise privileges, should be made to conform to a like standard.

### Attitude of the Courts.

Laws expressing this demand have been passed in many cities and states. Thus there are laws affecting railways already constructed which require vestibules on surface cars during winter months, or prescribe maximum hours of work, or provide for appliances to lessen risk in coupling steam railway cars. There are likewise laws insisting that in all contracts for public works there shall be clauses to establish a minimum or the "prevailing" wage, or a maximum day. As to provisions of this nature, seeking to prevent the evils of the padrone system, and of a general demoralization of the labor market, it may well be argued that they are a matter of as great public concern as are the

usual strict stipulations against interference, even temporary, with traffic on the public thoroughfares.

It must be admitted, however, that the courts have not commonly taken this view. While conceding large "police powers" and the right to fix any contract specifications which are intended to further a public interest, they have shown marked disfavor toward provisions of this particular kind.

In test cases the grounds variously assigned have been "class legislation," "taking of property without due process of law," "interference with freedom of contract," and the "spending of public moneys for other than public purposes." In short, the courts are only slowly beginning to recognize that the maintenance of a proper standard of living among quasi-public employes is neither against public policy nor contrary to the spirit of our free institutions, of which the courts assume to be judges; that it is rather a motive having justification quite as strong as has the desire to carefully safeguard neighboring property owners, or to insure greater comfort to travelers—provisions for which, however onerous, the courts have almost invariably sustained.

But this discussion has to do more specifically with the policy of embodying similar labor provisions among the conditions precedent to public franchise grants. In view of the frequency with which such clauses have long been considered in the letting of public contracts, this special phase of the movement is surprisingly new. The recent legal works on franchises and on public service corporations are wholly silent upon the point, while even the most progressive thinkers have prepared discussions of the desirable franchise clauses containing usually no reference whatever to the subject. Yet the intense feeling among the New York trades' unions at the omission of wage and hour clauses from the Pennsylvania tunnel grant indicates that henceforth the subject is to be one of keenest controversy.

#### Instances Cited.

A careful though not exhaustive research brings to light almost no franchises in this country which have contained clauses of the kind in question. Detroit has made one street railway grant containing a ten-hour clause, and Mayor Johnson was responsible for a compulsory arbitration clause in a similar Cleveland franchise. The section in the Cleveland ordinance was as follows: "Whenever any controversy

arises between the grantee under this franchise and his employes, which interferes or threatens to interfere with the operation of the road, each side of the controversy shall appoint two persons as its representatives, who shall constitute a Board of Arbitration, whose actions shall be final. If said Board fails to agree within three days then the Mayor shall become the fifth member of the Board and a majority vote of said Board, consisting of five members, shall be final. No motorman or conductor shall work more than ten hours within the limits of fourteen hours in any twenty-four hours, except in case of emergency causing obstruction of traffic." The whole franchise containing this provision was declared void by the Circuit Court of Ohio. The decision, however, did not single out the arbitration clause as the chief defect, but held only that it was one of several sections which tended to prevent favorable bids, and which taken together were contrary to the state law providing that new franchises must go to the highest bidder. This decision, coming not from the highest court in the state, being based largely upon other points involved, and founded at best upon a strained logic, will probably not have great weight outside of Ohio. In fact, the courts in most states have said emphatically that any specifications will be upheld whose reasonable effect is to insure greater safety, comfort or continuity in the transit service.

A similar arbitration provision, and one which the courts sustain, occurs in a street car franchise in the City of Seattle, granted in accordance with the following section in the City Charter: "It shall be the duty of the City Council to incorporate in every franchise or amended franchise efficient provisions for the compulsory arbitration of all disputes arising between the grantee therein and his, its or their employes as to any matter of employment or wages, unless upon submission to the electors of the city, a majority of the electors voting upon the question submitted shall assent to the granting of such franchise without such provision."

In Europe, labor clauses in franchise grants have been somewhat more frequent than in this country. They have varied in effectiveness all the way from the establishment, since 1898, of a pension fund and of a ten-hour day on the Berlin roads, to the elaborate provisions attached to the franchise lease of the subway system in Paris.

Privilege to operate the Paris subway was conceded only upon stipulation, among other things, that the men should be paid never

less than 150 francs per month, or for temporary work not less than 5 francs per day, that their hours of work should not exceed ten, with one full day's rest in seven, that a vacation of ten days each year should be given them with full pay, and that their wages should not cease during periods of temporary illness nor while recovering from the effects of injuries sustained while at work for the company. It was likewise stipulated that the employes should have gratuitous medical and drug service, and that the company should insure the men against injuries by accident. The fund required for this purpose must be controlled by the workmen through their chosen representatives.

It may be added that careful provisions were made for the comfort and convenience of passengers, and for very reasonable fares, including a four-cent round trip for any one going to work before nine o'clock in the morning, and a one-cent fare for school children. While the city has constructed the subway tunnels, the cost is to be paid out of the earnings which accrue during the period of the lease, and the whole system, including tracks and rolling stock put in by the lessee, is at the end of 35 years to revert to the city.

#### Recent New York Decisions.

During the recent agitation for a wage and hour clause in the Pennsylvania tunnel franchise it was objected that such provisions would be unconstitutional. This argument was based largely upon the case of *People ex rel. Rodgers against Coler*, decided in February, 1901, by the New York Court of Appeals. In this case a divided court, against a powerful dissenting opinion, declared unconstitutional the state law which provided that the "prevailing rate of wages" should be paid on all construction work done under public contract. The reasons assigned were as follows:

1. In making local improvements a city is not an agent of the state; its right of self government entitles it to make its own contracts for such improvements, which cannot be prescribed by the state without violating constitutional guarantees.
2. The constitution provides that the public expenditures of a city shall be only for city purposes; hence the city cannot make a contract which obligates it to pay more than the necessary or market rates of wages, because such a contract requires the expenditure of public funds for a private purpose.

3. The act violates the constitutional rights of liberty and property of local property owners, who bear the expense of the improvement; because, when the expense is enlarged beyond its actual and reasonable cost, their property is taken without due process of law.

4. Similarly, the property (*i. e.*, contract), of the contractor is taken without due process of law by the imposition of burdensome conditions with respect to the means of performance of the contract, thereby depriving him of its benefits.

It would seem that most of these points could not be made against the insertion of a labor clause in a franchise grant. Thus, there would be no conflict as to state and city jurisdiction. For while in theory all franchises have their source in the state, most of the states have established uniform general laws for their creation, making consent of local authorities one of the essential conditions. In construing these laws the courts have conceded that as a part of their power to give or withhold consent the local authorities have a right to insist upon conditions. Even here, however, there is possible doubt whether the courts in some instances might not condemn labor clauses as "unreasonable" and as inserted for private as distinguished from public purposes. The second and third points, having to do with the spending of public moneys and the burden on taxpayers, would, of course, not apply, inasmuch as the granting of franchise rights does not usually contemplate expense to the city.

The fourth point in the *Coler* case was to the effect that such clauses are an arbitrary interference with freedom to make contracts and to acquire property. The logic of this argument was most ably combated by Chief Justice Parker in his dissenting opinion. Nevertheless it secured a majority vote of the court, and would probably be held to apply with as much force to a franchise as to a contract for construction work to be paid for by the city.

Although some of our ablest judges, such as Judge Parker in New York, and Judge Holmes, formerly of Massachusetts, now in the United States Supreme Court, uphold the legality of wage and hour provisions in contracts for public works, still the trend of decisions is against them. Whereas eight hour laws have been sustained by the highest court in Kansas, by the next court to the highest in New York and by the United States Supreme Court, they have been overthrown in Ohio, Illinois, Washington, Texas and California. Laws prescrib-



ing a minimum wage or calling for the prevailing rate have been upheld in Kansas, but declared unconstitutional in Ohio, Pennsylvania and New York. Several points made against these provisions in contract work would, as already stated, not apply to franchises. Nevertheless the array of decisions is sufficiently impressive to give rise to doubts.

#### Suggested Provisions.

The plan, however, of requiring compulsory arbitration appears to obviate most if not all of the legal objections, and to have other very important merits peculiar to itself. The Chicago Street Railway Commission of 1900 in its report to the City Council makes the following wise observation: "The public has a right to demand uninterrupted street railway service. To that end it has a right to insist that everything reasonably possible be done to prevent strikes and lockouts. Companies in accepting grants should be required to submit all labor disputes to arbitration."

As will be seen, this report approaches the subject entirely from the point of view of the traveling public, seeking to avoid such acute social disorders and interruptions of traffic as have been recently witnessed in Cleveland, New Orleans, St. Louis, Providence and other cities. It is contended that for a city to exact an agreement for arbitration is as proper as insistence upon any other assurances of good and continued service. The city, to be sure, having no direct dealings with the workmen, can not bind them to arbitrate. But it is obvious that no street railway strike at least can be successful without the backing of popular sentiment. Such backing would be denied in a case where the men should refuse to arbitrate.

As to the machinery for arbitration, some such arrangement as that now existing between the New York Central Federated Union and the Association of Rapid Transit Contractors might be provided. This consists of a board of ten men, five chosen by the contractors, five by the men. To it all grievances are presented, and in case of failure to agree an outside arbitrator is to be called in.

Trades Unionists and other advocates of the labor clause principle would probably act wisely in most cases should they withdraw their demand for fixed wage and hour prescriptions and turn their efforts to the obtaining of an arrangement by which arbitration shall be mandatory upon franchise grantees. Such provisions would make the secur-

ing of just terms of employment sure and easy, while the courts would sustain them as being reasonable guarantees of the public convenience. Agitation for their adoption would have a great advantage in that it would be supported not only by the sentiment for just terms of employment, but also by that large body of opinion which regards strikes as costly social disorders.

*Cases Upholding Eight Hour Laws:*

Vol. 94 U. S. Rep., page 400.  
Vol. 59 Pac. Rep. (Kans.), page 336.

*Eight Hour Laws Overthrown:*

22 Wash., 327.  
7 Oh. Dec., 354.  
188 Ill., 206.  
12 Tex. Civ. App., 45.  
85 Cal., 274.

*Minimum Wage and "Prevailing Rate" Laws Upheld:*

59 Pac. (Kans.), 336.

*Such Laws Overthrown:*

7 Oh. Dec., 354.  
167 Pa. St., 47.  
166 N. Y., 1.

## REFERENDUM AND INITIATIVE IN RELATION TO MUNICIPAL OWNERSHIP.

BY GEORGE H. SHIBLEY.

Back of all questions of public policy concerning municipal ownership and public franchises are the deeper and more vital questions: Who shall exercise the discretionary power as to these subjects, and How shall this discretionary power be exercised? The first question, *Who shall vote?* is not a live question in America, except as to woman suffrage, and this question is not before the convention.

But the next question is before us. Shall the voter's power to decide questions of municipal ownership and public franchises be delegated completely to representatives, or shall the voters reserve to themselves a veto power and the power to directly propose measures to their legislative agents, who, after due consideration, must submit the initiated measures to a direct ballot of the voters, with their recommendation or a competing bill? The answer is found in the history of municipal government.

Our municipal history shows: *First*, that the voters are taking to themselves more and more a veto power as to questions concerning municipal ownership and public franchises; *second*, that the voters are clothing themselves more and more with a direct initiative; and *third*, that there is no instance, we believe, of a reversion to the unguarded system of delegated power. This demonstrates that a people's veto and the direct initiative are suited to the highly developed conditions of municipal government of modern times.

### Results Analyzed.

The benefits derived from the system are clearly shown by analysis. All political power is inherent in the people. In delegating to Congress, legislatures and common councils the power to legislate, the people have not reserved to themselves a veto power nor a power to directly propose measures, and consequently the law-making power comes to be vested

in a few men. The result is that the laws provide for monopolies in private hands, and the rich and powerful are favored in other ways. Because of this—because the laws are made by the few for the few—the wealth of the country is going into the hands of the few. This tendency to private monopolies and concentration of wealth is reversed by establishing majority rule—a people's veto and a direct initiative. Laws are enacted that terminate the privileges, and society is protected in other ways.

Majority rule is attained by adding to the representative system of legislation a people's veto, exercised through the optional referendum, and a direct initiative, exercised by petition or through the use of pasters affixed to the official ballot at elections. In short, the final power is in the people instead of in the political machine. This transfer of the final power is of tremendous importance.

1. The "machine" can no longer enact laws which the people do not want, and it cannot prevent the enactment of the laws which the people do want.

2. The machine, thus stripped of final power, becomes worthless to those who hold special privileges or who desire special legislation. Accordingly there is no investing in politics to secure special privileges or the retention of such privileges. This class of campaign funds becomes extinct. No longer are such funds a factor in nominations or elections, and it is useless to attempt to bribe the people's representatives.

3. The elimination of campaign funds for special privileges leaves with the people the free choice of their representatives, and naturally they select those who are best able to act as legislative counselors.

4. These competent representatives are not instructed. This is because the final power is in the voters. The representatives are invited to use their own best judgment, as do lawyers and doctors. In each case the principal protects his interest by reserving to himself the final decision.

5. The bills proposed to the people by their expert counselors can each be singled out and balloted upon by the people if they so desire. But the mere existence of this veto power is effective. Seldom is a bill referred to a direct ballot; and then it is as to close questions only.

6. The bills passed by the legislative body come before the people on their real merits; for the confusing effects of party spirit are elimi-

nated. Party spirit pertains to party candidates and general principles.

7. The result of all these advantages is that the laws enacted are of a more enlightened character than is the case under party government—a system in which the will of the few prevails. The evils of representative government are removed, while all the advantages are retained and others are added. It is the representative system combined with majority rule; the laws reflect the enlightened will of the majority. The carefully matured bills of the experts are nearly always accepted, and usually without a direct vote.

8. Under this system of enlightened majority rule there follow, inevitably, (a) home rule for municipalities, (b) a high grade merit system in the civil service, and (c) public ownership of municipal monopolies. The few refuse home rule, they fight the merit system, and they hand over the municipal monopolies to private corporations. It is clear, therefore, that in considering the practicability of municipal ownership, we must distinguish between the systems of government under which it is proposed to operate the public utilities.

#### **Prevents Interference by Laborers.**

Municipal ownership is frequently objected to because the employees, it is said, will become unduly powerful in politics. This objection applies to the existing system of representation. The evil is partially cured by providing the optional referendum and the direct initiative, and fully cured by proportional representation. In Switzerland the federal legislators enacted a law for an old age pension for federal employees, without including the people at large. This attempt to secure a special privilege for office-holders was resented by the people. A petition demanding a referendum vote was circulated, and an unusually large number of signatures were secured. In the election, the bill was vetoed by the largest majority ever known. A peasant, explaining his vote, said: "When I am old and past work I do not get a pension; then why should these gentlemen in the federal offices get one? Their income is much larger than that of many a citizen." The objection was not to an old-age pension, but to a special privilege.

In Australia, where this system is not installed, proportional representation is advocated by the Australian government as the remedy for undue political power of government employees. It came about in this way. A year or more ago the Australian government proposed to

lower the wages of the employees of the government railways. The employees resisted and at the next election were able to defeat the government, because the votes of the railway employees were distributed throughout the country and were a balance of power in many districts. To terminate this undue exercise of political power, the government proposes, not to abolish government ownership of the railways, but to install proportional representation as to railway employees. Thus, public ownership of monopolies tends toward proportional representation. The usual order of progress is, first, the referendum and initiative, then public ownership of monopolies, then proportional representation.

Where the mayor and aldermen have the final word as to legislative policies, it is impossible under manhood suffrage to secure a business administration. The legislative power being in the few, they administer the city affairs from their standpoint rather than from the public standpoint. The politicians who are most successful under such a system are those who promise jobs to the political heelers and then keep their word; and usually the successful politicians must enter into agreements with the holders of public franchises and with those who are seeking to secure such privileges. These evils are terminated where the voters take to themselves the final word as to legislation—a veto power and a direct initiative.

The development of the people's veto and direct initiative in this country may be briefly outlined. The settlement of New England by a liberty loving people, versed in local self-government, who set up what was practically a democracy, followed by representative government when the population was such as to make it necessary, resulted at the outbreak of the Revolutionary War in the framing of a written constitution by elected delegates in Massachusetts, and the adoption of the proposed system of government by a direct ballot of the people. The first constitution in New Hampshire was adopted in a similar manner, and this system of proposing and adopting changes in the state constitution has spread until it has been used in every state except Delaware.

#### Extension of Direct Legislation.

Gradually the referendum has been applied to the more important of the statutory measures, such as the creation of public debt and the levying of an unusually large tax.



As to municipal franchises, the Legislature of Iowa in 1872 applied the referendum to franchises for water works, and sixteen years later the party in power applied it to the establishment of municipal gas works and electric light plants. In 1897 the legislature provided the optional referendum and initiative for nearly all questions of municipal franchises and public ownership. In Indiana, by act approved March 2, 1899, the optional referendum was established as to ordinances for the purchase or establishment of water works or lighting plants or the granting of an ordinance for the establishment or operation of any water works, lighting plant, street railroad, telegraph or telephone. In Massachusetts, two years ago, Governor Crane vetoed a bill for a street railway franchise in Boston because, among other things, it did not contain a referendum clause. And in the state campaigns of last year the dominant parties in several of the states placed in their platforms pledges to enact statutes applying the referendum to municipal franchise questions. In South Dakota and Utah the referendum and initiative have been applied to municipal questions by constitutional amendment.

This surrender of power in the states just mentioned has come slowly. The people have succeeded because they have demanded it insistently, except, perhaps, in Iowa. In Illinois, the people by a vote of five to one in the last election instructed the members of the legislature to enact a statute for the municipal referendum and initiative, and submit a constitutional amendment. But it is likely that this practically unanimous vote will not secure the desired legislation. The ruling few are refusing to abdicate. It is likely that nothing short of an active campaign against the nomination and election of the opponents of majority rule will bring the desired action by the legislature.

#### Procedure Suggested.

A recent discovery, however, enables the voters in each city to emancipate themselves. They can establish majority rule in local affairs without securing the consent of the state machine. And there is practically no expense and very little work. This wonder-working system is the questioning of candidates for alderman and mayor as to whether, if elected, they will vote for rules of procedure wherein the voters are provided with a system for instructing their representatives in the common council. The instructions may be (1) as to ordinances

that may pass third reading, except urgency measures and the usual appropriations, and (2) a provision that five or ten per cent. of the voters may directly propose measures. An illustration is to be found in the Detroit rules:

"Every ordinance granting, amending or renewing a franchise for a public utility, which may have passed its third reading shall, before its final passage, lie on the table thirty (30) days from and after the date of this third reading, and, if within that time a petition signed by eight members of the common council, or five per cent. of the qualified voters of the city, as shown by the last preceding registration, be filed with the city clerk asking that such ordinance be submitted to a vote of the qualified voters of the city, it shall be so submitted at the next election, and if a majority of the votes of those voting on it at said election favors its passage, it shall then be put upon its final passage; but not otherwise."

This rule of procedure is for the optional referendum. The following rule provides a direct initiative:

"That any measure, instructing officials, incorporated in a petition signed by at least five per cent. of the qualified voters of the city or any subdistrict thereof, as required by and stated in said petition, the number to be determined by the last preceding registration, shall, upon being filed with the city clerk at least one month before election, be submitted to a vote of the qualified voters of the city or such subdistrict, as the case may be, at the next ensuing election.

"That the said city clerk shall advertise or publish said measure or instructions in full twice a week, in four daily newspapers published and circulated in this city, for the four consecutive weeks immediately preceding said election.

"That the preparation of the ballots and ballot boxes and the procedure for the balloting and the canvassing of the votes, as well as the penalties, shall be the same as now provided by law for voting on bond issues and constitutional amendments or other referendum submission."

This rule-of-procedure system, or Winnetka system as it is frequently termed, is installed by merely questioning the candidates for alderman and mayor. The questions are asked by the secretary or other officer of the non-partisan organization, using the letter-head of the association. The report, when made up, is given to the city press. Few of the candidates have the hardihood to publicly proclaim that, if elected, they will vote against the establishment of majority rule. In Winnetka, Ill., and at Geneva, Ill., all candidates gave the pledge. In Detroit, last autumn, 31 of the 34 candidates elected were pledged. In Toronto, last January, 17 of the 24 aldermen were pledged, and in Chicago, 18 of the 34 aldermen elected last spring were pledged.

If there is considerable time before the opening of the municipal campaign, it is well to introduce the rules of procedure in the common council and get a vote if possible. With an election near at hand there is likely to be a unanimous vote, as was the case in Detroit last June, as to the rule of procedure for franchises.

PROCEEDINGS  
OF THE  
NATIONAL CONVENTION  
ON  
Municipal Ownership and Public Franchises,

HELD UNDER THE AUSPICES OF THE

NEW YORK REFORM CLUB COMMITTEE ON CITY AFFAIRS.

In the Assembly Room of the Club, 233 Fifth Avenue, New York City,  
Wednesday, Thursday and Friday, February 25, 26 and 27, 1903.

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WEDNESDAY MORNING SESSION.

Mr. John G. Agar, chairman of the convention, delivered an address upon  
"The Problem of Municipal Ownership."

The paper, "Recent History of Municipal Ownership in the United States,"  
which was partially prepared by the late Professor Charles Waldo Haskins, was read  
by Professor Joseph French Johnson, who undertook the completion of the paper  
after Professor Haskins' death, assisted by Dr. E. S. Meade. (Published in this  
issue.

Owing to prolonged illness, Mr. Josiah T. Newcomb was unable to complete his  
paper upon "Political Influence of Corporations holding Public Franchises." In its  
absence, the Chair called upon Mr. Clinton Rogers Woodruff, secretary of the National  
Municipal League, to lead the discussion upon Professor Johnson's paper.

GROWTH OF DEMAND FOR MUNICIPAL OWNERSHIP.

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BY CLINTON ROGERS WOODRUFF.

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What is the cause of the undeniable growth of popular interest in the municipal  
ownership of public service franchises in this country? Is there a well-founded and  
intelligent public opinion on the subject due to the conviction that our municipalities  
should, as a matter of sound public policy, directly perform all municipal functions  
without the intervention of third parties, and should not permit undue private profit  
to be gained from the discharge of public services?

There was a time when private monopolies and privileges were granted to favored  
persons and no one thought much about the impropriety of the proceeding. Those

who did not receive such grants thought that possibly in the future they might be more fortunate, and so they acquiesced in the existing injustice. Then there came an awakening. The people, realizing the essential unfairness, injustice and unsound policy involved in such a procedure, created a public opinion that would not tolerate such a course. Democracy asserted itself and the evils of personal monopolies and special privileges disappeared, only to reappear, however, in another and more insidious form. The then newly devised corporation took the place of the individual, and it has thrived mightily, but most unfortunately at the expense of the community.

The reasons are not far to seek. Corporate action can be made less direct and conspicuous. Expenditures are much more easily covered up. A private person who would plead ignorance of the final disposition of an expenditure would be looked at askance. The head of a large corporation, however, can offer the same plea with entire assurance that it will be credited, because its transactions are so numerous and generally so complex that it is next to impossible for one man to be informed accurately and thoroughly on every department and detail. Corporations make large expenditures with less question than an individual. Therefore, those inclined to take advantage of the weaknesses of others and to secure unfair privileges by indirect and unscrupulous means can accomplish it more expeditiously through a corporation than through individual enterprise and with little or no chance of discovery. Imagine the surprise we would all feel if we should ascertain that a leading business man had an item on his books of \$50,000 for "legislative expenses"; but the average man does not appear to be startled in the least when he sees or learns of a similar item on the books of a corporation.

All of this justifies the recent statement of an economist that "corporations do not recognize the principle of righteousness, candor, courtesy or, indeed, any of the personal virtues, except energy and enterprise, which, according to the old English economists, are assumed to be essential to continued business success. I do not mean to say that the common virtues may not be appreciated by men intrusted with the management of corporate enterprises, or that they do not practice such virtues in their personal affairs. But such is the nature of intercorporate competition that the managers of corporations are obliged to recognize a dual code of ethics, one for the business; one for the home."

This tendency and the influence of the distribution of capital stock in a community are growing and are undermining to an appreciable extent sound public sentiment on questions involving franchises. A stockholder in a street railway company can hardly be expected to look favorably upon a more rigid municipal control, even though that policy may be commanded by the highest interests of the city. The holder of shares in a gas company cannot be expected to view with favor a movement having for its object the establishment of a municipal lighting plant, no matter how strong and numerous may be the arguments in favor of such a course.

If, as is now generally admitted, that the grant of a monopoly or a special privilege to an individual is unsound public policy, if not immoral, why should such a grant be considered right when made to a group of individuals, associating themselves together in a corporation. This question becomes all the more pertinent when we take into consideration the fact, as stated by Charles Whiting Baker, one of the editors of *Engineering News*, that "out of the relations between city governments and franchise companies have grown three-quarters of the municipal corruption of the past two decades."

I might occupy the morning with a recital of experiences in American cities which will amply bear out Mr. Baker's statement. Recall the scandals incident to the passage of the notorious Broadway franchise in New York and the convictions which followed their exposure and investigation. Recall the scandals incident to the passage of the notorious Allen bill by the Illinois legislature. In 1897, Philadelphia leased her gas works to a favored corporation in the face of a bid \$10,000,000 better. Of this transaction William Draper Lewis, the Dean of the Law School of the University of Pennsylvania, said at the time: "There is an almost universal belief among all classes in the city that bribery has been used to obtain the acceptance by the city government of this lease. This belief is not confined to those who are opposed to the lease, but is shared by many who were strongly in favor of it. The belief that these men used bribery to obtain property shows to what depth of degradation we have come." A few years later the Mayor of Philadelphia (Samuel H. Ashbridge) shocked the whole country by his contemptuous flinging aside of a cash offer of \$2,500,000 for certain street railway franchises which were about to be given for no consideration whatever to favored corporations. Of a certain mayor of Kansas City it was said "that he acted more like the attorney of the telephone monopoly than mayor of the city."

The disclosures and convictions at St. Louis have all grown out of the corrupt relations existing between certain branches of the city government and the street railway companies. It has been less than a year since a member of the city council of Cleveland, Ohio, rose in his seat and displayed \$2,000 in bills, declaring that it was part of a bribe offered him to put through an amendment to an ordinance desired by a public service corporation. Mayor Snyder, of Los Angeles, Cal., in an address before the League of California Municipalities in January, 1902, said: "I have had more or less to do with politics in Los Angeles for the past twelve years and I have never seen a convention in Los Angeles, whether it was Republican, Democratic or Populist, where the party had a chance of electing its nominees, at which the water company was not present with its sack."

But why multiply illustrations? They will recur in great numbers to every thoughtful student of municipal affairs in this country. Indeed, the corporations have about abandoned the policy of attempting to deny these facts. In most places, where the circumstances justify it, as they do in Philadelphia, they brazenly say, "What are you going to do about it?" and go ahead with their nefarious schemes. In places like Chicago, however, where the people have, through the agency of bodies like the Municipal Voters League, secured an honest council, a different course is pursued, in which the rights of the people are formally recognized, but the day of their enforcement is postponed.

To recur, then, to the question which I asked at the beginning, "What is the cause of the undeniable growth of popular interest in the municipal ownership of public service franchises?" I reply that the movement is primarily due to the popular indignation felt at the corruption and degradation incident to the policy of private ownership. The people are awakening to an appreciation of the dangers lurking in the shadows of such relationships as now exist between city governments and private corporations. There is an ethical reaction against such practices as I have briefly mentioned, and it is manifesting itself in a demand for municipal ownership.

As yet I doubt whether there is any very general feeling on the essential impropriety and immorality of a policy which permits private concerns to enjoy public privileges for their private profit. What inherent right has any individual to become rich through the

grant of a municipal franchise or privilege? is being asked, here and there, but public interest is at present so deeply concerned with the more glaring features of the corrupt relations now existing between cities and corporations that it will be some time before municipal ownership is advocated, because of an objection to corporate monopoly based on the same grounds as now exist against personal monopoly.

I have used the term municipal ownership throughout my remarks as distinguished from private ownership. I have not used it to include or imply municipal operation. That is another question; because for some time to come in most places we will have to utilize private concerns and their experience and business capacity, but only as agents and not as principals. In other words, the compensation of private corporations must be limited to a fair return for the services rendered and no more. This for the reasons already alluded to and for the further reason that it will remove the sources and cause of temptation now so powerful and influential and which have done so much to bring the governments of our cities into disrepute.

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Hon. William Wirt Howe, formerly President of the American Bar Association, New Orleans, has summarized as follows the experience of Louisiana:

#### EXPERIMENTS IN LOUISIANA.

BY WILLIAM WIRT HOWE.

The experience of Louisiana and her chief city in the matters to be discussed by this convention is recorded not only in statutes and ordinances, but also in decisions of the Supreme Court of Louisiana and of the Supreme Court of the United States. The decisions that will be referred to have the merit, at least, that the facts have been investigated by the diligence of counsel and judges, and that the results may be relied upon with some confidence.

The topics to which I will briefly allude may be separated into four divisions, namely, levees, surface drainage, sewerage and water supply.

I.—The Louisiana Levee Company was organized under Act No. 4 of the General Assembly of Louisiana of 1871, ratifying and confirming a charter which had been prepared under the general law. Its capital was not to exceed \$20,000,000, and it undertook to contract with the State of Louisiana to build and maintain levees on the Mississippi river and its tributaries. It was to receive and disburse certain levee taxes, and its promoters expected it to be a great financial success. These hopes, however, were never realized. In 1875, under Act No. 24 of that year, the amount due the company by the state was liquidated at \$1,700,000, and directed to be funded in consolidated bonds of the state issued under Act No. 3 of 1874. This attempt, however, to settle this balance was defeated in the litigation reported in the case of the Board of Liquidation *vs.* McComb, 92 U. S., 531, and the attempt of a private corporation to build levees came to an end. Since that time, under various constitutional and statutory provisions, the alluvial portion of the state has been divided into levee districts, each having a board of commissioners, each levying and collecting a levee tax and receiving a portion of the general state tax for this purpose, and also levying and collecting sundry assessments for benefit received, which, after some litigation, have been held to be valid.

II.—The question of surface drainage for the removal of storm water in New Orleans has been the subject of experiment, legislation and litigation. The city is



situated on an alluvial plane, protected by levees and falling back from the river toward the low lands lying between the city front and Lake Pontchartrain. In a state of nature, the storm water would easily run back to the low lands and find its way in part through various bayous and channels toward the lakes that lie in the rear of the city. But since the town began to be covered with buildings and pavements the storm water thrown from the roofs would back up in the thoroughfares to such an extent as to make them absolutely impassable. The disposition of sub-tropical showers became a very difficult one.

By Act of March 19, 1835, the New Orleans Draining Company was created with a capital of \$1,000,000, part to be taken by the state, part by the city and the rest by private persons, with power to drain the city by canals and draining machines and throw the water into Lake Pontchartrain. Many of the provisions of this statute proved to be impracticable, and by Act of March 20, 1839, the plan of the company was largely changed so as to assess the cost of drainage, with a liberal rate of interest, on the lands to be benefited. In April, 1856, the validity of these acts came before the Supreme Court of Louisiana, and after an animated discussion and considerable dissent among the members of the court, the validity of the legislation was sustained. (11 Louisiana Annual R., 338.)

By Act of March 18, 1858, the system was again changed. The territory now composing the city of New Orleans, on the left bank of the river, was divided into three draining districts, and a board of Commissioners appointed for each district. An appropriation was made from the swamp land fund to aid in carrying out the purposes of the statute; authority was given to issue draining bonds; and summary remedies were provided for the assessment of expenses upon all the lands to be benefited, including streets and other public grounds.

By Act of March 2, 1869, the laws creating the draining districts were repealed and the control of the work and the possession of the property turned over to the local authorities, but nothing of importance seems to have been done under this regime.

On the 24th of February, 1871, the legislature passed an act entitled: "An Act to Provide for the Drainage of New Orleans," empowering a private corporation known as The Mississippi and Mexican Gulf Ship Canal Company, as contractor, to excavate draining canals and build protection levees within the corporate limits of New Orleans and Carrollton, the latter city being now the Seventh District of New Orleans. The existing drainage system and all its property and uncollected assessments were transferred by this statute to the council of the city of New Orleans, then called the board of administrators. An additional assessment was provided for and the funds were to be held in trust to pay the canal company for its work. A large amount of work was done under this law at somewhat expensive rates. But in 1872 the company became embarrassed and transferred its rights to a private individual. By Act of February 28, 1876, provision was made for the purchase by the city from the canal company and its assignee of all their rights under prior statutes and all tools, implements and machinery in their possession, and under this statute the city of New Orleans assumed control of the system. For a long time, however, little new work was done and the flooding of the streets was frequent.

By Act No. 14 of 1896 another plan was adopted, under which the drainage of the city has been very largely improved. During the previous year a committee of experts had made a careful survey and prepared an elaborate plan, and this was adopted by the Act of 1896. A board of commissioners was appointed and provision

was made for turning over to that board a considerable amount of money realized from the sale of street railroad franchises, also from certain taxes which had gone into an improvement fund, and a limited issue of bonds was authorized. Under this system a large amount of really effective work has been completed and we are beginning to hope that at an early day the storm water in New Orleans may be carried off with rapidity and in comfort. In 1902 this drainage system was merged in the system of water and sewerage, which will be referred to hereafter.

III.—Coming now to the question of sewerage, it may be stated that for a long time it was supposed that underground sewers were not practicable in New Orleans. The alluvial plane on which the city is situated, as already noted, falls away from the Mississippi river, and it was probably true that sewers of the large old-fashioned type, receiving both storm water and household drainage, would not have been desirable, and might have become exceedingly offensive and unwholesome. In 1880, however, it was suggested that the small pipe, separate system devised and applied by the late Colonel Waring, for the city of Memphis, might be used in New Orleans; the general plan being to have a small sewer in each street at right angles to the river and running thence toward the lake with a natural fall of about ten feet, which might be considerably increased by placing the sewer at a greater depth in the rear of the city than in front. These small sewer-pipes were each to be armed with a flush tank, and to lead into a large intercepting sewer in the rear of the city, which in turn would lead to a cemented basin from which the sewage would be forced by steam pumps through an iron main into the river below the city and below low-water mark.

The legislature of 1880 passed an act authorizing the formation under the general law of corporations for the purpose of sewerage and drainage and providing that such companies, if employed by any municipal corporation for this purpose, might have a lien upon the property drained for the charges of such service. Under this law a private corporation was formed, called the New Orleans Sewerage and Drainage Company, and after long discussion the council adopted an ordinance making a contract with that company to build a system of sewers according to the Memphis plan and authorizing it to charge certain rates for buildings and houses according to their size. It was expected that the company might be as successful in these enterprises as an ordinary gas company, and the charges provided were no larger than those which had been usually paid by householders for the emptying of the old-fashioned vaults under the sanitary regulations of the city. For various reasons, however, the company did not succeed in raising the required capital, and the enterprise was abandoned and the ordinance repealed. The plan, however, continued to attract attention, and in 1892 the council re-enacted the ordinance, substantially, in favor of a private person as grantee and his assigns, and the New Orleans Sewerage Company was organized and undertook to carry out the work. It purchased property in the rear of the city for a pumping station and constructed a large and deep intercepting sewer, and then became insolvent and went into the hands of a receiver for want of sufficient capital.

Under the Constitution of 1898, provision was made for public improvement taxes, to be voted by property taxpayers at a special election, and on these questions women were allowed to vote in person or by written proxy. Such a vote was had in New Orleans in favor of a sewerage and water tax of two mills per annum for a term of forty-three years, and the plan thus carried at the polls was ratified by the statute of August 18, 1899, and further affirmed by a constitutional amendment authorizing

an issue of bonds to capitalize the tax. By Act 111 of 1902 the Drainage Commission mentioned above, which was devoting its efforts to the care of storm water, was merged with this sewerage and water board. The latter board has already begun to carry out the so-called Memphis system of sewerage by taking over the work done by the private company above named, at a valuation, its right to do so having been affirmed by the Supreme Court of Louisiana in the case of *Brennan vs. the Water and Sewerage Board*, reported in 32 Southern Reporter, page 563. This decision contains what is presumably an authentic account of the New Orleans Sewerage Company, of the proposed acquisition of its works by the sewerage and water board, and a general account of the origin of the latter board.

IV.—We come now to the water supply of New Orleans, and in giving a brief account of this subject we may refer to the decision of the Supreme Court of Louisiana, in the case of the State *vs.* the New Orleans Water Works Company, 107 Louisiana Reports, page 1, rendered in 1902.

By Act of April 1, 1833, a corporation was created by the legislature of Louisiana under the name of the Commercial Bank of New Orleans, which, after the fashion of the day, was endowed with banking privileges, while at the same time its principal purpose was to supply the city and people of New Orleans and its faubourgs with water from the Mississippi river by means of pipes and conduits, and by the erection and operation of necessary machinery for that purpose. The capital stock of the corporation was fixed at \$3,000,000, of which the city took \$500,000. The period of the existence of the corporation was fixed at thirty-five years, with a provision to the effect that at the expiration of its charter the city should have the right to purchase the plant at a valuation to be determined by appraisement and to pay for the same in bonds. The operations of this company were carried on in a very primitive way until the expiration of its charter. The water of the Mississippi river is said to be very good when properly filtered, but its filtration presents a very difficult problem, and the Commercial Bank never made any serious attempts in this direction, nor did it ever erect any modern appliances in the nature of stand-pipes.

In 1868, upon the expiration of its charter, the tangible property of the company, including lands, buildings, machinery, reservoirs, etc., was appraised at \$2,000,000, and transferred to the city of New Orleans in exchange for bonds, which amounted, after the deduction of the shares of the city and certain dividends to her credit, to about \$1,400,000. The administration of the city lasted from January, 1869, to April, 1878, and was of a most unsatisfactory character. The finances of the city were in a bad condition; the number of open hydrants constantly diminished; and the collection of water rents was irregular. The holders of bonds which had been given in payment for the works were pressing for payment of interest, and in March, 1877, the legislature passed the Act No. 33 of that year, establishing another corporation, essentially private, called the New Orleans Waterworks Company, authorizing the company to issue bonds for the purpose of extending and improving the works, permitting the holders of the city bonds to convert them into stock and providing for the liquidation of certain bonded and floating debt of the city of New Orleans. The capital stock was fixed at \$2,000,000, of which \$606,600 was retained as the property of the city, being the same interest it held in the Commercial Bank, and it was further to retain one share of stock for every \$100 of water works bonds which it had extinguished by payment, exchange or otherwise, and further provisions were made to enable the holders of water works bonds to exchange them for stock. It was provided that the board of direction should have seven members, of which three should be city officials.

The act conferred also upon the new corporation all privileges acquired by the city from the Commercial Bank, and gave it, for fifty years from the passage of the act, the exclusive privilege of supplying the city of New Orleans and its inhabitants with water from the Mississippi river, or any other stream or river, by means of pipes or conduits. Provision was made for the increase of the capital stock and for the right to borrow money and issue bonds not exceeding \$2,000,000, secured by mortgage on the property of the company, with the consent of the city council, for the purpose of improving and enlarging its works and increasing the supply of pure water. Provision was made that the city should have the free use of water for extinguishing all fires and for other public purposes, and the company should place, free of charge, hydrants of the most improved construction in front of each square where a main pipe should be laid so that water might be freely drawn for the extinguishment of fire and for other public purposes. It was also provided that in consideration of this, the franchises and property of the New Orleans Waterworks Company, issued in accordance with these acts, should be exempt from taxation. Power was given to expropriate private property and to appropriate public property for the erection and extension of new works. The right was reserved to the city council to grant to any person or persons contiguous to the river the privilege of laying pipes to the river exclusively for his of their own use.

This statute was further amended in 1878 so that the four directors above mentioned should be elected by the stockholders other than the city. The time for erecting new works was also extended. In March, 1878, the company was so far organized that it elected its first board of directors, and in April following the entire water works property and plant was conveyed to this company by notarial act. The company, some time after, erected a modern stand-pipe in such a way as to secure a head of about sixty feet, added a considerable amount of pumping machinery, and laid a large number of additional mains. It also made some expensive experiments in an attempt to filter a sufficient quantity of the water of the Mississippi river to supply the city, but these experiments were not successful. It seemed impossible to thoroughly filter the water of the Mississippi river at New Orleans on account of the presence of what is popularly called "blue clay," which can only be entirely removed by the use of a coagulant in connection with the filters.

In 1882 a dispute arose between the city of New Orleans and the company with respect to the exemption from taxation, and it was held, in the case of the City of New Orleans *vs.* The Waterworks Company, 36 Louisiana Annual, page 432, that the exemption was unconstitutional, but that the city should pay for the water it required up to an amount equal to the taxes recovered, leaving upon the company, however, the obligation to furnish the water supply exceeding that quantity free of charge. By Act No. 56 of 1884 the city was required to pay for all the water obtained by it in any year during which it might claim and recover taxes from the company, and a contract to this end was made pursuant to that legislation, and was sustained by the court in the case of Conery *vs.* The Waterworks Company, 41 Louisiana Annual, page 913.

The water works company and its rights and alleged demerits became the subject of much animated litigation, some of which turned upon the question of its rates. It would seem that water rates have long been a vexed question in the courts, since we are told that a manuscript lately discovered in Rome is a transcript of a case which arose there, perhaps in the second century, on this subject, against an association of laundrymen. Complaints on this subject were numerous and bitter in

New Orleans. On the one hand, the company alleged that its charges were lawful, and were not, as a matter of fact, exorbitant; and, on the other, consumers complained that the rates were illegal and extortionate. After the water and sewerage board had been organized, as stated above, and the question arose of its taking over the property of the New Orleans Waterworks Company, either by agreement or condemnation, a suit was begun against the company to forfeit its franchises on various grounds, including the allegation that it had been charging certain excessive rates in violation of law. The suit was tried at great length in the lower court and decided in favor of the company, but on appeal the Supreme Court of Louisiana reversed the decision and rendered a judgment of forfeiture of the charter and of all its franchises. *State vs. Waterworks Company*, 107 Louisiana, page 1. During the pendency of an application for rehearing the United States Circuit Court for the Eastern District of Louisiana, at the suit of a bondholder, appointed a receiver of the company, who is now operating it. The probabilities are that the water and sewerage board, which has been established as stated above, will take over the physical property of the water works company and include it in a new and extended system operated by a public board.

It would seem that foregoing details might possess some interest for the student of politics and political economy; and there is this to say, at least, that the decisions of the courts to which reference is made, as well as other cases cited in these decisions, may be considered as original sources to which the student may safely refer for information upon the points concerned. Many curious experiments have been tried in Louisiana, not only those which have been recited in this paper, but many others. For example, in the early days we had what were called "Property Banks," organized as a medium for extending to planters the credit of the state and of the banking corporation, and which, naturally, were not a success. We had a railroad corporation with banking privileges, and a gas-light company with the same powers. There was also a banking company authorized to excavate and operate a navigation canal. These ideas, however, have mostly become obsolete; and so far as the purposes of this paper are concerned, it may be stated that our levees are now built by the state with some assistance from the government of the United States; that our surface drainage in New Orleans is no longer under the charge of a private corporation, but has been taken hold of by a public board; that the sewerage of New Orleans is not being attempted by a private company, but is to be dealt with by public agencies, and that the water supply of New Orleans, in the near future, will be in charge of the public authorities.

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Mayor Thomas Urquhart, of Toronto, continued the discussion:

#### PUBLIC FRANCHISES IN TORONTO.

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BY THOMAS URQUHART.

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On the question of political influence I may say that party politics do not enter into our municipal elections to the same extent that they do in the cities of the United States. I am a member of the party which is in a decided minority in Toronto, but notwithstanding this I was elected. Another evidence is that three members out of five on our board of control (which is the chief executive committee of the council) are supporters of the party which is in the minority.



Referring to public franchises, our water works have been owned some 20 or 25 years by the city. In 1897 our receipts amounted to \$463,985.22; our expenditures to \$437,415.37; our profit, thus, to over \$25,000, after providing interest on the debt and a sinking fund to redeem debentures. In addition there was a charge against the receipts of \$72,596, expended on capital account, so that the total profits really amounted to about \$100,000. In 1898 it was still larger, and in 1899 a committee was formed to consider the question of revising the water rates. After mature consideration they decided to cut the rate to the ordinary water taker fifty per cent. This change went into effect in 1900. In 1901 the gross amount received was \$347,259.05; the total expenditure for the same period was \$435,504.49; but in this expenditure there was the sum of \$40,504.92 expended on capital account, which would bring the actual cost of maintenance down to \$395,000. This shows a loss of over \$40,000, but in our water expenditure we have charged up the cost of maintaining a park at the reservoir, and the water used in some of the parks and for other city purposes is only charged at a nominal or very low rate, so that notwithstanding the great cut in price, the revenue is almost equal to if not above the expenditure, which should be charged against the users of water.

To make clear how low our water rate is, I have compiled the following table:

	Per annum. Net amount.
House of 4 rooms and 2 inmates, without bath and water-closet.....	\$1.20
House of 6 rooms and 4 inmates, without bath and water-closet.....	2.00
House of 8 rooms and 4 inmates, without bath and water-closet.....	2.40
House of 8 rooms and 6 inmates, without bath and water-closet.....	2.80
House of 4 rooms and 2 inmates, with bath and water-closet.....	3.20
House of 6 rooms and 4 inmates, with bath and water-closet.....	4.00
House of 8 rooms and 4 inmates, with bath, water-closet and basin.....	4.80
House of 8 rooms and 6 inmates, with bath, water-closet and basin.....	5.20

Prior to 1891 our *street railway* was operated by a company as a horse railway. The company's franchise expired in that year, the City purchased the plant, etc., and granted a franchise to another company for a period of thirty years. The terms of the new agreement may be briefly expressed as follows:

The company has the exclusive right to operate an electric surface street railway for passengers in the city of Toronto. The company took over all the property acquired by the city from the old company, including rails, rolling stock, horses, real estate, etc., at a price determined by arbitration. At the termination of the contract in eighteen years, the city may take over all real and personal property necessary to be used in connection with the railway, at a valuation to be determined by arbitration, each party to bear one-half the cost of such arbitration.

The city is to construct, reconstruct and maintain in repair the street railway portion of the roadways, viz., for double track 16 ft. 6 in., and for single track 8 ft. 3 in. on all streets traversed by the system. The company is to establish and lay down new lines on such streets as may be from time to time recommended by the city engineer and approved by the council.

Day cars commence running on all routes at 5.30 A. M. and run until 12 o'clock midnight, at such intervals as the city engineer, with the approval of the city council, may from time to time determine. Night cars are run on all routes at such hours and intervals as may be deemed necessary by the city engineer, with the approval of the city council.

Single cash fares are to be five cents. A class of ticket is sold at the rate of eight for 25 cents, the same to be used only by passengers between the time the cars commence running and 8 A. M., and between 5 and 6.30 P. M. Another class is sold at the rate of 25 for \$1, and another class at the rate of 6 for 25 cents. Children under nine years of age, and not in arms, are carried at half-fare rates, and infants in arms are carried free; school children have school tickets at the rate of 10 for 25



cents, only to be used between 8 A. M. and 5 P. M., and not on Saturdays. The payment of a fare entitles a passenger to a continuous ride from any point on said railway to any other point on a line or branch of said railway within the city limits.

Cars are to be of a design approved of by the city engineer, and the company is to build and equip a car factory within the city limits for the manufacture and repair of all cars and railway plant, etc.

No employee is to be compelled to work for a longer period than ten hours per day, or 60 hours per week, or more than six days per week, and no adult employee in the service of the company to be paid less than 15 cents per hour.

The company pay the city \$800 per mile of single track per annum, and on the first Monday of each month the following percentages of the gross receipts from passenger fares, freight, express, mail rates, and all other sources of revenue derived from the traffic:

On all gross receipts up to \$1,000,000, per annum, 8 per cent.

Between \$1,000,000 and \$1,500,000 per annum, 10 per cent.

Between \$1,500,000 and \$2,000,000, per annum, 12 per cent.

Between \$2,000,000 and \$3,000,000, per annum, 15 per cent.

And on all gross receipts over \$3,000,000, per annum, 20 per cent.

The system of accounts and bookkeeping adopted by the company is approved by the city treasurer and the auditors appointed by the city.

This agreement was considered at the time it was made to be the best agreement that any municipality had made with a company. In 1897 a new agreement was negotiated permitting a car service on Sunday, the cash fare to be same as on week days, but seven tickets to be sold for twenty-five cents, good at any hour during the day.

Since 1891 the city has received from the company the following:

	MILEAGE.	PERCENTAGE.	TOTAL.
1891 (four months).....	\$18,135	\$22,967	\$41,102
1892.....	55,134	65,239	120,373
1893.....	56,340	72,234	128,574
1894.....	58,170	76,385	134,555
1895.....	60,000	78,196	138,196
1896.....	60,000	78,922	138,922
1897.....	60,000	85,673	145,673
1898.....	64,000	98,631	162,631
1899.....	64,000	111,426	175,426
1900.....	64,000	127,128	191,128
1901.....	68,000	145,209	213,209
1902.....	70,274	165,173	235,447

In addition to the foregoing, the company pays taxes on a large valuation of property, our receipts in this way in 1902 amounting to \$22,758.96.

Notwithstanding the fact that this agreement was considered so excellent a one for the city, it has proved to be a most excellent one for the company. On obtaining the franchise they issued bonds for something like \$3,000,000, with the proceeds of which they practically paid for the reconstruction of the road. They also issued stock to the amount of \$6,000,000, of which amount not more than 10 cents on the dollar was paid by the promoters of the company, and on this stock they are to-day paying a 5 per cent. dividend.

I am convinced that if the city of Toronto had operated the franchise for themselves they would have made just as much money as the company has, and possibly more, as the company spent a considerable amount to obtain the fran-

chise, while for the money they borrowed they paid at least 5 per cent., whereas the city could have borrowed it for  $3\frac{1}{2}$  per cent.

The service given by the company has not been as good a service as the council and citizens have demanded; and the chief difficulty we have found under the agreement is the enforcement of the rights of the city by compelling a proper observance of the terms of the contract.

Another problem which has been receiving considerable attention during the past two years is the admission of freight and passenger traffic brought by radial railways centering in the city. When we disposed of the franchise to the Toronto Railway Company in 1891 we excluded from the contract the right to carry freight. The suburban railways are largely owned by the same persons who own the Toronto railway franchise, and they are now making application to us to permit them to carry freight over the Toronto lines into the city. The terms upon which this permission may be given are at present under discussion, but have not yet been settled. One point, however, has been strictly adhered to in all our discussions in this connection, namely, that the city shall have the right to take over all street railways within its limits, at a price to be determined by arbitration, upon the termination of the franchise or lease in 1921.

Our gas company was chartered by the provincial legislature in 1848. Under their charter they practically have a right for all time to enter upon our streets, within certain limitations, for the purpose of laying down gas mains. They are, however, limited to a dividend of 10 per cent. per annum. The charter was amended several times by giving the company permission to increase its capital stock, and finally, in 1887, upon a request to the legislature to again increase the capital stock, from \$1,000,000 to \$2,000,000, it was arranged that the stock should be sold by public competition and the profit over and above the par value added to the reserve fund, and this reserve fund was not at any time to amount to more than one-half the issued capital of the company. But they were permitted to establish a "plant and building renewal fund account," to which they were entitled to add 5 per cent. of the value of the plant each year.

The amount of the stock issued by the company up to the present amounts to \$1,750,000, and the company have never permitted the reserve fund to reach one-half of this amount. The price of gas, however, has been reduced from time to time, until the present price is 80 cents per thousand cubic feet, for both heating and lighting purposes.

We do not think that the company have dealt as economically in the management of its affairs as they might have done, and the citizens two years ago, upon a general question submitted to them, voted in favor of the city acquiring the plant. This is a matter which will probably be dealt with in the near future; but legislation may have to be obtained before we can compel the gas company to sell out to the city.

Another franchise which is owned by the city is that of the cattle market. We have constructed and own all necessary buildings, and each year we lease, for one year only, the privilege of collecting the fees and selling the hay, oats, etc., necessary for the proper conduct of the market. For several years we have had a considerable surplus of revenue over the expenditure.

The city of Toronto is the largest owner of wharfage facilities. These we let to tenants for a shorter or longer term, and are a source of considerable revenue.

The municipal corporation is also the largest owner of real estate within the city limits. It owns the whole of Toronto (or Hiawatha) Island, opposite the city, containing some 500 acres of land, part of which we lease for summer residences, and a large proportion of which is reserved for parks and playgrounds. We have also a large amount of property in the centre of the city, which is leased for a term of twenty-one years, the leases being renewable. In the eastern part of the city we possess about 1,300 acres of marsh lands along the water front, which we are now placing in condition for occupancy by manufacturing and kindred industries, for which they will be particularly suited.

In telephony, the Bell Telephone Company has long had a monopoly in the city of Toronto. We had an agreement with the company for some years, but it expired in 1896, and was not renewed. There has been considerable agitation in favor of the municipality establishing a system of their own. The telephone question is now receiving the attention of the dominion government, who have been and are being urged to take over or at least regulate long-distance lines, so that local municipalities or independent companies may have the right to connect with existing long-distance lines. What the outcome of the present situation may be cannot be foretold, but we are looking forward to it ending in the better control of the long-distance services, and at the same time the adoption of a plan which will enable the municipalities to enter into the telephone business if they so elect.

During sessions of the dominion and provincial parliaments, it devolves upon the representatives of the city to be especially vigilant. Companies of various kinds and magnitude are continually making application to both houses of parliament for franchises, and it is therefore necessary to be ever on the alert to prevent the acquirement of rights which would militate against and sometimes seriously involve the best interests of the citizens.

So far as my own city is concerned, we have an emphatic sentiment in favor of municipal ownership, which, I confidently believe, permeates all classes of the community.

A DELEGATE—Do you have public baths?

MAYOR URQUHART—No. The city water supply is in nearly every house. There are certain institutions, such as the Y. M. C. A., which have swimming tanks, but none have been established by the city.

A DELEGATE—I would like to ask by virtue of what permission in the agreement between the railway company and the city it is possible to obtain ownership?

MAYOR URQUHART—We cannot obtain ownership until the expiration of the franchise term.

MR. L. N. CASE, manager of the Water and Light Department of Duluth—The experience of Duluth in the operation of its water and gas plants is modern history. In 1898 the city, goaded to extremities by the actions of the private company then owning and operating these plants, purchased them for the sum of \$1,250,000, at an annual interest charge of \$56,000. At the same time, for the purpose of obtaining pure and wholesome water, it built a supplementary system, running down the lake about ten miles, with pumping works and large reservoir, costing \$1,200,000, which also was borrowed and on which there was an annual interest charge of \$55,000.

This plant so enlarged, together with the gas plant, was placed in the hands of a board consisting of five members, which organization was made practically independent of political influences by charter enactments. For four years this board and

its manager have operated these plants simply on business principles, maintaining an intelligent, honest and economical administration of their affairs.

During that time, it has paid from earnings the expenses for operation and maintenance, and the interest on the original purchase and on the cost of the supplementary system, the latter amounting annually to \$111,000. It has received from the general tax levy only such assistance in the shape of hydrant rentals as were given the company under its franchise, with the exception that during the past two years it has received the sum of \$23,501.06 under a special provision of the Charter "to be used exclusively in the reduction of water rates." During these four years, the water rates have been reduced more than 33 1-3 per cent. and its gas rates reduced from \$1.90 to \$1 per thousand.

On the 1st day of January, 1903, the plants had accumulated in cash, bills receivable and operation materials, over \$55,000. The reduction of its gas rates has aggregated a saving to its consumers of \$54,141.35; the reduction of its water rates, \$107,564.41. It has aggregated in other savings, cost of meters and service extensions, and reductions in lawn sprinkling and fountain rates, \$10,000 additional.

Summing up these items, there has been a saving of \$226,705.76. The charges against this amount are: Receipts from tax levy, \$23,501.06; and taxes it would have received, \$62,000, or a total of \$85,501.06. The people have, therefore, netted in cold cash or its equivalent over \$141,000 in the four years' operation of these plants.

The gas sold in 1898, the year in which the city purchased the plant, amounted to twenty million feet. In 1902 there were sold fifty million feet, and the service is most satisfactory to the people.

The *Duluth Evening Herald* of January 13, 1903, said: "The record of the water and light commission is a great triumph for the advocates of municipal ownership. It was contended by opponents of the municipal ownership idea that the acquisition by the city of the water and gas plants would mean poor management and the imposition of heavier burdens on the taxpayers. It was predicted there would be a large annual deficit to be paid out of the general taxation. The result has been the reverse. Under the direction of business men who have freely given their time to the service of the city, not only have the plants been self-sustaining, but rates have been largely reduced and the service greatly extended and improved."

Mr. John Martin then read the papers by Hon. Robert P. Porter and Mr. Robert Donald, both of London, which are published in full in this number. Dr. Milo Roy Maltbie discussed these papers as follows:

#### THE CONDITIONS OF MUNICIPAL SUCCESS.

BY MILO ROY MALTBB.

The papers just presented show how different may be the conclusions drawn regarding municipal activity. But even Mr. Porter will admit that municipal operation is a success, in a few instances; and Mr. Donald, who favors the extension of municipal functions, does not deny that in some instances it has not succeeded as well as private enterprise has elsewhere. Consequently, there must be certain conditions which make for success and certain others which produce failure. No one will assert that there is some magic power in municipalization that will instantly and always produce beneficial results.



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I assume it to be generally understood that success is not measured necessarily by the net profit of the undertaking or by the unusually high wages which may be paid laborers, but by the resultant of a large number of factors, among which are included the financial results and the conditions of labor, but more especially the character of the service rendered, the price paid for service, the progress made from year to year by the introduction of new methods and inventions, the relative amount of product or service secured from a unit of raw material and labor, and the promptness with which the undertaking is made to conform to changing social and economic conditions and to serve the city and its citizens in the highest degree. Viewed from this standpoint, the undertaking which yields large profits used to decrease taxation may be a failure, for the service may be bad, the price charged may be high, and the attitude toward social and economic needs of the city may be such that the undertaking hinders the highest development of the city, even though it may decrease taxation. This is not a theoretical condition, for in some English cities—fortunately the number is small—the position of the municipality has been very much like that of certain private corporations where the apparent purpose has been to make as large profits as possible at the expense of the users.

From this higher point of view, what are the conditions which make for success in municipal industries?

First and foremost, the character and ability of the men administering the undertaking and determining its policies. Without competent engineers, administrators and laborers, it is utterly impossible to achieve success. Unless the city can secure as able men in all departments as are employed by the private corporations, the latter are bound to be superior; and when competent men are secured, and when they are permitted without hindrance to conduct the undertaking to the best of their knowledge, a city has gone a long way toward making its municipal undertaking a success. In this connection, one warning in particular should be kept in mind—while the city council or the elective officials of the city should determine the general policy of the department, they should not constantly change nor attempt to interfere in actual administration when once the program has been determined upon. Hardly anything can produce worse results than constant tinkering with an enterprise upon the part of those who are not familiar with administrative and engineering matters, or a constant oscillation between diametrically opposed policies.

It goes without saying that the interference of the spoils idea is destructive to progress and success. All desire to pay personal or political debts must be excluded. In order that the best men may be secured by the city, their tenure must be coincident with good service; but, upon the other hand, the idea should never be allowed to prevail that when a city position has once been secured a minimum amount of effort will retain it. Indeed, I am of the opinion that where civil service rules have been established, there is more need for the exercise of the removal power than there is danger of surplus activity in this direction. The labor question is one of the most difficult in municipal operation, and I must say that experience seems to indicate that cities do not usually get as much out of their employees as does a private corporation.

Further, if city employees are to give good service, they must be paid good salaries, especially the leading administrators and engineers. Here, too, cities are apt to err, although the English cities are in a much better position than those in the United States, for the higher officials there get more nearly what would be paid by private companies than in American cities. The former also draw to their employ-



ment many able men, because of the social standing and of the general feeling that a high city official is to be looked up to and accorded esteem, which is not the attitude in many American cities, although some progress is being made in this direction.

Another factor which explains to a considerable extent the success of English municipal enterprises is a form of competition. Each town wishes the best management, and when the citizens find that gas, for instance, is selling at a lower price for a better quality in Glasgow than in Manchester, they are apt to demand an explanation, and if one is not forthcoming to complain so openly and effectually as to force the local management to adopt a reform. Comparison is also made between private undertakings and municipal undertakings, and the managers are made to feel that bad or unwise administration will be punished and that good management will be rewarded.

This is a very important factor, for Great Britain has practically abandoned the idea that competing gas, water or street railway companies conduce to the best results. In fact, there is scarcely a British city where the consumer, if dissatisfied with the service of one company, can secure from another company the same sort of service. There is, of course, competition between gas and electricity—between different services—but not between one gas company and another gas company—not between companies supplying the same commodity. It is very important, therefore, that competition of the character described above—inter-municipal competition and competition between private company and municipality—be developed and made very active and that public opinion always be keenly alive to local conditions. It is a check upon monopoly, whether private or public—a check that is everywhere needed.

Supplementary to this control which the citizens exercise over the management of an undertaking, there is the supervision of the central government at London. For example, loans must be approved by the local government board, which sees that proper provision is made for sinking fund payments, which fixes the time within which the loan must be paid and which, in various other directions, safeguards the interests of the citizens future and present. Other departments examine other phases of the scheme, and upon the expert advice thus given the central government decides whether the undertaking will be authorized, and, if so, upon what conditions. For instance, the maximum price of gas, the minimum quality, the speed of street railway cars, the character of motor power, the sources of water supply, forms of accounts, etc., are carefully determined. While it is true that the excellent character of the local authorities often renders this control unnecessary, its very existence is effective, and in some instances the supervision is directly of great importance.

Given these factors—an honest and efficient corps of employees, well paid and with recognized social standing, a settled policy of municipal operation, continuous management, proper methods of accounting, keen competition between different industries and different towns, an active and wise public opinion, proper central control and supervision, with, of course, adequate powers and local independence to manage the undertaking wisely—there is no reason why municipal enterprise may not be as successful and probably more successful than private management. This does not mean that every municipality will conduct every undertaking better than the best managed private company operating under the most favorable circumstances, but it does mean *ceteris paribus* that the municipality will administer more wisely to the needs of a community than will the private corporation. Without the conditions mentioned above, however, municipal enterprise cannot be a success.

The paper by Mr. Edward T. Heyn, of Berlin, upon "Recent History of Municipal Ownership in Germany," was then presented. It will be found elsewhere in this issue.



## WEDNESDAY AFTERNOON SESSION.

Mr. JOHN G. AGAR, presiding; Mr. JOHN MARTIN, Secretary.

Mr. Charles R. Bellamy, General Manager of the Municipal Street Railways of Liverpool, England, who came to New York specially to attend the convention, gave the address printed elsewhere in this issue. After its completion, Mr. Bellamy was questioned as follows:

DR. PRINCE (of Boston)—Mr. Bellamy states that the population of Liverpool is 700,000. I want to ask what is the total population within the radius served by the railways?

Mr. BELLAMY—The total population served is slightly in excess of the figures I gave. Liverpool is a big, fan-shaped city. A great deal of the traffic is by the ferries crossing to the western side of the Mersey; we have no western traffic at all on account of the river.

Dr. SPAHR (editor of *Outlook*)—Do I understand that a uniform fare of two cents is charged from the outskirts to the centre. Has Liverpool adopted a uniform fare or a graduated fare?

Mr. BELLAMY—It is practically a uniform fare. We have a universal penny (2 cents) fare within the old city, and double that beyond, and 90 per cent. of our passengers pay the penny or two cent fare.

Mr. POMEROY—Have you had any difficulty in regard to municipal suffrage?

Mr. BELLAMY—We have had no difficulty whatever in Liverpool in that regard. We took over all the employees of the company, and they were so grateful for the change that they are living in perfect contentment, and we hope that will continue.

Mr. POMEROY—Is that \$120,000 subject to the addition of the local tax?

Mr. BELLAMY—Yes.

Mr. POMEROY—In twenty years the property will be owned by the municipality?

Mr. BELLAMY—It is owned by the municipality now, but in thirty years it will be free of debt.

A DELEGATE—Except for the depreciation of the plant, which will be double the value of the plant in twenty-five years.

Mr. BELLAMY—In regard to depreciation, we are maintaining the plant out of revenue, and from the sinking fund we set aside £50,000 (\$250,000) a year as a depreciation fund in addition to the sinking fund.

Mr. LOCKWOOD (Detroit)—I would ask Mr. Bellamy whether operation and waste that go into expense come out of depreciation, and if so what percentage they amount to of the amount invested?

Mr. BELLAMY—I should have to make up the percentage charge. A very heavy charge—30 to 40 per cent. of the track maintenance.

Mr. LOCKWOOD—What would you estimate the total maintenance charges to be?

Mr. BELLAMY—Last year about 60 per cent. That is the charge of operation. The capital invested was \$9,000,000.

Mr. KELSEY (East Orange, N. J.)—May I inquire in regard to the capitalization of the undertakings?

Mr. BELLAMY—If a municipality wishes to raise money, it must apply to the Local Government Board. That body deposes an inspector to investigate the whole matter, to listen to objections and to the arguments in favor of the application. If the inspector reports that the application is reasonable, then authority is given to raise that capital. There is no limit so long as it can be shown to be required for the performance of the undertaking.

Rev. MORAN (New York)—I want to ask what hours the motormen and workmen work for the municipality in comparison with the company's tramways. With us the wage question is serious, and the question of hours is more serious.

Mr. BELLAMY—If we were paying our men the same rate and working them the same number of hours the company was, it would cost us \$200,000 less per annum than it does. That is in a measure given to the men—\$200,000 practically distributed among the men in addition to free uniforms. The men under the company worked thirteen hours; they work ten with us and six days of the week as against seven.

A DELEGATE—Has the management found it practicable to prevent overcrowding in the cars? Is it found practicable to give passengers generally seats?

Mr. BELLAMY—We have a different system from yours. We have a double-decked car and carry people outside on the top as well as inside. Of course, climatic conditions are different at different seasons. In my annual report I demonstrated that for more than two-thirds of the year outside travel is pleasant and can be indulged in in Liverpool. For the remainder of the year it is inconvenient; the thermometer is either below 35 degrees or too warm. For two-thirds of the year our carrying capacity is ample. In the winter we do allow nine passengers to stand inside our cars before we drive them to the top. We recognize that we must cover the upper deck of our cars. We are engaged in that work now, and when we have done that we shall absolutely prohibit standing in any part of the car, and provide each passenger with a seat.

Mr. HEINEMAN (Detroit)—What branch of the city government has charge of transportation, and how is it constituted?

Mr. BELLAMY—It is governed by a committee appointed by the council. There are eighteen members, and it is elected by the council itself. A committee of selectmen is formed at the beginning of each municipal year for the purpose of selecting members to the various committees. They take representative men, men of experience. We are always very careful in our country to keep good men in the council. For instance, on the Water Committee, the Lighting Committee, the Tramway Committee, there is always a preponderance of men of experience. The new men coming in at the beginning of the year are spread among the different committees. The position carries no salary, being entirely honorary.

A DELEGATE—We are told, Mr. Bellamy, that the municipal employees in these departments bring pressure to bear in politics to secure higher wages. Has any such indication been shown in Liverpool or any other municipality known to you?

Mr. BELLAMY—Yes. I have heard of a little trouble. A union was formed among the tramway men, and Liverpool sent her delegates, and one or two meetings may have been held in Liverpool; but as I have stated, our men are particularly well paid, and I rather think they are held in check in this way. We have in the Liverpool council a number of labor representatives, and they have come to the conclusion that our men are very well paid, and I think they would object as representing outside labor to having their wages unduly advanced. I think that will be the practical solution. You have the outside working element and the ratepayers objecting to the men in municipal employ having their wages advanced beyond reasonable limits.

Dr. DUGGAN—You said something about double-decked cars. One objection to them is that they are not so rapid and are very cumbersome. Do you keep experts on hand to look after new appliances?

Mr. BELLAMY—We claim to be experts in such matters ourselves—that is part of our business. I may tell you that during last year we had no less than thirty-three

deputations from other corporations come down to look at our undertaking, and the improvements that were being made.

Mr. Fox (New Haven)—I am very sorry I failed to come here in time to hear Mr. Bellamy's paper. I spent two days in Liverpool inspecting its street railway system, largely under the guidance of Mr. Bellamy, and I want to speak of it in words of the most unqualified praise. My only question is the financial result.

Among the things I saw which impressed me were, first, your lighted signs which tell where the cars go; second, the cars were so well lighted that in the evening I could read my newspaper; third, the cars were not overcrowded; you did not have to hang by straps or stand as you do in the street cars of the ordinary company here; fourth, all your men wore neat and clean uniforms, your cars ran very regularly and stopped at regular places. I also noticed that they were all closed in below, front and back, but not above. I remember you or one of your assistants told me they were made in America. Is that true?

Mr. BELLAMY—Yes.

Mr. Fox—Then, another point. After a long contention in the House of Lords, it has been decided that a municipality which buys out a private company shall pay the price of its stock on the Stock Exchange. But the statute provides that when a tramway lease falls in, the municipality may take the property at the then value. Anything beyond that goes to the community. There would be no sale for its shares, because its lease will have expired. The appraisement is on what is considered the actual value, and not on what is considered the stock value.

The water companies are in a different category. If you purchase the stock of these companies, you have to buy it at the Stock Exchange value.

Dr. BEMIS (Cleveland, Ohio)—I wish Mr. Bellamy would explain, as I heard him explain some two or three years ago, his method of appointing men; for in this country we are inclined to think only of appointment by rigid examinations. In England that is followed to some extent, but the general manager has absolute power usually.

Mr. BELLAMY—We have some twenty-five hundred men connected with the street railways. There is a regular method of procedure for an applicant. We inquire as to his antecedents—he must be a man of good character and refer us to responsible people. We have an age limitation—he must be between twenty-one and twenty-three. He must be over five feet six and not over five feet ten; we like to get men of uniform height as far as possible. These rules are left entirely with me.

As regards the staff, they are all junior appointments and are made as the result of an examination. These men come into the service when over eighteen and under twenty-two. If I want to increase my staff, I report to the Tramway Committee of the council that I want to have half a dozen additional clerks; they approve that and leave the rest to me. Advertisements are issued in the local papers and applications invited. These are closely scrutinized, and perhaps twenty of the most likely applicants selected upon the examination. The examination papers are prepared in part on the morning of the examination, and half an hour before I add a number of others and strike out some. The examination papers are passed over to my chief clerk and then to the particular departments requiring the additional assistants, and on the recommendation of these gentlemen I make the appointments.

Dr. BEMIS—How about your engineers and assistant managers?

Mr. BELLAMY—In the case of engineers and managers, advertisements are put in papers throughout the length and breadth of the land. Applications are invited

from all over the country and the names submitted to the committee having control of that department. They go through the papers and reduce the number to, say, six, and then they reduce it to two or three of about equal merit, and from these they make their selection.

Dr. BEMIS—I mentioned this because our method under the civil service rules is very different from the English method, which to my mind is superior.

Professor PARSONS (Boston)—I examined the Liverpool plant with great care and interest some months ago, and fully indorse everything that has been said in regard to its superiority, except in two respects. I heard complaints there of the breaking of the wires overhead and their coming down on the people on top of the cars. Mr. Bellamy has taken to covering the cars, and I suppose that will prevent future trouble in that respect. And there is one other thing—the speed of the cars was not as great as we think is right in this country in most of our cities. I would like to ask Mr. Bellamy if the management is responsible for it or if the law limits the speed of the cars?

Mr. BELLAMY—The law limits the speed of cars. A Board of Trade inspector is sent down from London. The procedure is this: We get authority to construct a line and we build it. Then the Board of Trade sends an inspector to go over the line, and he, with regard to traffic conditions, fixes the maximum speed. This is fixed in Liverpool at ten miles an hour. You must not press us too closely as to what rate we do run at, because it may be sometimes greater.

Mr. FOX—I would like to ask you one question regarding your double-deckers. May there not be some danger of electrical shock because the trolley is not lifted as high as the height of some men? Have you made any provision for protection against this danger?

Mr. BELLAMY—We have, sir. I would like to reply more fully to Professor Parsons. Some three years ago we had an American visitation. We had the pleasure of having one of your blizzards, and several bunches of telephone wires fell. As all of our emergency crews were already out, we could not turn out any more when the last calls occurred. Forty-seven wires fell in that bunch; they coiled around two people and they were killed. The woodwork fell and we had no one there to act, and that is how those two people were killed. The fact was, our work was perfectly secure, but the telephone wires had fallen and we were helping the telephone people. We came to an agreement, and at this moment we have not a telephone wire crossing a trolley wire in Liverpool. We have never injured electrically any person on our cars since we have been in business. Our total fatalities, including one of our own men, who fell from a height, amounted to only eight cases, and the ratio per annum was one to thirteen million passengers carried. The railway record of casualties is very much worse, being one in 1,800,000.

A DELEGATE—It would seem to me that the chief danger in this country, the probable danger, at least, of municipal ownership of street railways would lie in the fact that local interests would attempt to have a railroad developed in certain directions, in a certain route for the local interests of certain people. In Boston, for example, South Boston or East Boston would insist on having their line developed entirely apart from the system as a whole. I would like to ask Mr. Bellamy whether local interests or politicians have attempted to determine in what direction a line should run?

Mr. BELLAMY—Not at all. I do not think that has ever been a trouble with us. Applications have been received more or less from time to time, and such applications

are always submitted to me and reported upon to the committee. Whenever the general manager reports adversely there is the end of the matter. He must give reasonable objections to the proposition, but if he can advance reasonable objections, there is an end to it. No trouble of that sort has ever arisen with us.

Mr. LOCKWOOD—What is the difference in speed in the old city and in the suburban districts in miles per hour?

Mr. BELLAMY—Six in the centre of the city, eight as we approach the suburbs and ten outside.

Mr. Charles T. Yerkes' paper was then read, followed by Hon. Edward M. Shepard, who spoke upon "City Owning and Leasing." (Both of these addresses are published in full in this issue.) The discussion was as follows:

Mayor URQUHART—Mr. Shepard stated, if I understood him rightly, that in the event of the company not carrying out their agreement, or the agreement covering the quality of service, the city could bring an action for specific performance. I want to ask whether there is any speedier way of determining the action, or would it go from court to court?

Mr. SHEPARD—The Rapid Transit Law provides that actions of that kind brought in behalf of the city shall have preference over all other actions and may be brought on eight days' notice.

Mayor URQUHART—And appealed from court to court?

Mr. SHEPARD—Unless there was a very good reason for appealing, the decision of the court below would stand, and the company would be in the vocative upon the appeal.

Mayor URQUHART—We have found in asking relief from railways that the matters went from court to court and that the grievances continued to exist during the time.

Dr. BEMIS—Since he is doubtful about the effect of municipal operation, I ask Mr. Shepard if he could state what has been the general success of the railroad over the Brooklyn Bridge?

Mr. SHEPARD—I think I have been somewhat familiar—

Dr. BEMIS—I thought Mr. Shepard was familiar with it, and I wondered if he could not tell us something about the causes of its failure, if it has been a failure?

Mr. SHEPARD—It would be difficult to go into the details. I would say that the administration of the Brooklyn Bridge had been lamentable from the beginning and never more lamentable than under so-called municipal operation. I do not regard that, however, as an objection to municipal operation, for, in general, I am in favor of municipal operation, but I regard it as representing a perfectly inadequate and unintelligible view of municipal operation. I do not believe, if the city were to adopt the same management of that bridge again, we would have the same conditions.

Professor PARSONS—Was it not due to the fact that it was not managed by similar systems at either end, and that the ownership of the bridge was different in New York and Brooklyn?

Mr. SHEPARD—I wish I could say that I think so, but I do not think so.

Mr. SCOVILLE—May I ask Mr. Shepard whether the original contract, made for fifty years, was justified because a company could not be induced to build the road on a shorter term? Would he want to make the next term as short as

possible? If the contractor is going to get out even, he must make the people who use that facility during that period pay for that road.

Mr. SHEPARD—It is quite important to fix the number of years, and any one who has dealt with such a practical problem will endeavor to find out what is the sentiment of the people who are likely to bid for the contract. You might confine it to twenty-five or thirty years; if I could make a limit I would say make it twenty-five or even twenty years. Where you make the lease too short, you provide an inducement for those who build the road to do it inefficiently. The terms of the contract should be drawn so that that cannot be done. A system of inspection of the road as it is being built should be provided, as in these two contracts here.

Mr. SCOVILLE—I did not mean to make the suggestion that the road should be inefficiently built; that would be a notorious outrage. I simply meant that the pay for the road must come out of the pockets of the people who use it. If that be true, why make a contract that obliges the money to be paid back? Why not make a contract which would allow the city to take over the property at recurrent periods, and carry the people immediately at the lowest possible cost with the most efficient service?

Mr. SHEPARD—I do not feel that I am prepared to deal with just that question.

Mr. ALLEN (of Boston)—When the first act for a subway in Boston was proposed, it was proposed that the term of the lease to be granted should be fifty years, but there suddenly grew up a popular agitation, and a short lease was demanded instead of a long lease. Under these conditions, the legislature, pressed by public opinion, fixed the term at twenty years. When that matter came to the Railroad Commissioners for final adjudication, they found that no road was in a condition to make the lease on such term. They then made the term of the lease twenty years, but fixed the sinking fund so that it would extinguish the bonds in forty years. If you make the lease too short, you cannot get anybody to come forward and put up the money necessary to pay interest on the bonds and the sinking fund.

Mr. POMEROY—I would like to ask Mr. Shepard if we are to understand that the public use of public property should be under public control.

Mr. SHEPARD—May I trouble you to repeat the question? My attention was diverted for the moment.

Mr. POMEROY—I understood you to say that public property used for a public purpose ought to be under public control. I would like to know in relation to the subway we are building, which costs a great deal of money, if it will be under public control, and if it could be reached by the public authorities?

Mr. SHEPARD—I must have failed in clearness of my statement. I meant to say that public control should be exercised in one of two ways, either by directly appointing the men who are to administer, or by laying down a series of requirements, describing how the road should be run, should be operated, and then giving the public officials the power and the right to compel those requirements to be observed, and to prescribe new requirements should the development of the railway art make new requirements necessary. I must say at the present we had better proceed upon the latter theory until we have fairly tried it.

Mr. Louis D. Brandeis, of Boston, then addressed the convention upon "Massachusetts' Experience in Street Railways"; his paper appears elsewhere in this issue.



The SECRETARY—As the chairman is obliged to be absent on business, I have the pleasure of presenting to you Mr. August Lewis, who is one of the members of the advisory board. Mr. Lewis takes the chair.

The CHAIR—Questions and discussion upon this paper are now in order.

Mr. SCOVILLE—Are corporations occupying the public streets taxed in exactly the same way as the corporations which do not have the right of public streets?

Mr. BRANDEIS—They are taxed in substantially the same way. The rate is the same.

Mr. HEINEMAN—What revenue is derived from the street railway system other than the four and a fraction per cent. on its investment in the subways?

Mr. BRANDEIS—It is between three and four hundred thousand dollars.

Mr. FOX—As I must catch a train at five o'clock, I ask permission to address you very briefly on the general question. From what I have said it may be assumed that I am in favor of municipal operation. I am, for Liverpool. If I were an Englishman, I would be heartily in favor of municipal ownership, but as I am an American, I am strongly opposed to the municipalization of street railways in America, for certain reasons, one or two of which I will state. England for many years has had thoroughly established the merit system in appointment of its employees, and political pulls have very little, if any, weight. That is one difference between that country and ours. In the second place, they are free from what I may call local prejudice in appointments. As Mr. Bellamy suggested, a notice will be put in the papers for the position of engineer, and applicants will come from all over the kingdom. The best man will be taken, no matter where he lives. Here local prejudice is always a factor. It is not the best man from any place, but our local man.

There is no basis at all for concluding because these matters are successfully run by the municipalities in England that the same results will be secured in this country. My creed in this matter can be stated very shortly, for while in England municipal administration well deserves the admiration of the world, not only for efficiency but for pure administration, in our chief cities—Philadelphia, St. Louis, Chicago and New York—how many Augean stables there are to be cleaned? I would say, then, to those who advocate the municipalization of these enterprises in the United States: "Be thou faithful over a few things and then we will make you ruler over more things." Until we have done well the functions that we are now attempting, let us not attempt to discharge any more functions.

Massachusetts points the way to a wise municipal control. I wish that other cities would imitate the cities of Massachusetts. I regret to say that in my own state (I come from a state next to Massachusetts) promoters were not required to pay for stock before beginning work, but they have paid for it out of the bonds and have put the rest of the money in their own pockets. And there is a State of New Jersey in the United States!

The second point is this. In England there is a most admirable economic principle prevailing, supported by public opinion and based on their love of justice, that wherever the municipality or state performs for the citizen a peculiar and measurable benefit, it should require that citizen to pay into the treasury the cost of that benefit. What do we do in this country? Boston is now figuring out why its water department is not self supporting. In England every public bathhouse requires that the man who takes a bath there shall pay a small fee; but we in this

country, as Dr. Maltbie said in his monograph on *Municipal Functions*, are extending facilities and demoralizing the people in that respect by not permitting the municipality to charge for these services.

And after illustrating this idea with a quotation from John Burns, I will sit down, regretting I have taken so much of your time. The London County Council was very much interested in the condition of the submerged Tenth, and determined to have municipal lodging-houses for these poor fellows. They established a house and charged five pence a night for lodging. Owing to various circumstances they found that the first year they did not pay expenses. The matter was brought to the attention of John Burns, himself a member of the council, and he proposed that they raise the charge to six pence, which they did, and since that time that institution has been self supporting.

When the principle came up in connection with the London street railways a year ago last summer, and it was proposed to give its drivers and conductors three holidays with full pay by the London County Council, I had the pleasure of listening to his strong and able speech against it. He laid down the principle that the roads must be self supporting.

I feel that until we have three things well established and supported in this country, in its cities, first, the merit system, as I presume it prevails everywhere in England, and to my own knowledge certainly does in parts of England; second, the absence of local prejudice, and third, that one who receives a practically measurable benefit by the administration of a municipal function shall pay in whole or part for that benefit, we must not have municipal ownership, and we must follow the lead of Massachusetts.

Professor PARSONS—Mr. Brandeis has given us a roseate account of the situation in Massachusetts, and so far as small companies are concerned outside of Boston, I am happy to say that that situation in reality is represented by what Mr. Brandeis has stated. But I cannot agree that the situation has been fully represented as to the city of Boston and the big companies. Control through commissions works very well with the little companies that have not much capital, but when it comes to the big companies, the big lighting companies and the railway companies, it does not work.

The railway commission does not protect the people against secret rebates nor even make an effort to get at the facts on this most important subject. When the question of leasing the Boston and Albany was being investigated a few years ago, it was brought out by Professor Bemis and others that certain merchants and manufacturers were receiving 10 to 72 per cent. discount from the published rates. The investigating committee of the legislature asked the railway commission for the facts. After a time a report was handed in admitting that rebates or discounts of 10 to 72 per cent. were given by the railroad. Then the question was asked, whether the commission knew these facts from their own investigations or what the source of information was. And it came out that the commission, knowing nothing of the matter, had turned the question over to the railway, a high official of which (thought to be the attorney for the road) had written the report, which had been turned in to the legislature by the commission without investigation on their part or any effort to get any personal knowledge of the facts. Now, I submit that if Mr. Brandeis had an agent who behaved like that in any business of his, he would not be apt to retain that agent.

To illustrate the character of our commission a little further, take the gas and

electric lighting companies. If there is a case of gas overcapitalization in the world, it is in Boston, and the commission itself admits it. The capitalization is over \$42 per thousand feet of output, whereas a fair capitalization would be \$3. In Chicago and New York, bad as the gas situation is in those cities, it is only nine or ten dollars.

Some years ago the matter was investigated. Addicks, of Delaware, was the man who started the trouble. George Fred Williams, who did so much for the people in that case, went to the commission room and asked for a copy of the returns. One of the commissioners sent a boy to another room to get it. The boy brought it out and was about to hand a copy to Mr. Williams when the commissioner took it from him and tore off the last sheet, and handed the rest of it to Mr. Williams. That is all in evidence. Although part of it was eliminated in the published report, it was afterward fully published at the expense of the Mayor. When the commission gave out the facts upon that sheet it was found the sheet contained the details of the cost of manufacturing gas in Boston, which proved to be thirty-three cents a thousand. It was to be sold to the companies which Addicks held up for one dollar a thousand, and by these companies to the people at \$1.30. If reduction of rates were asked for the companies said, "We can not reduce the rates because we have got to pay Addicks a dollar a thousand." The commission had the actual facts as to the cost under promise not to make the facts public. Addicks at that time was making 95 per cent. profit on his actual investment.

The reason why the gas commission and the railway commission cannot be relied upon, although they are honest men, is that they are not in daily communication and contact with the great body of the people whom they ought to serve; but they are in contact with the officials of the corporations, and these officers are splendid men, except that they are trying to get their hands into other people's pockets, and they think it is necessary as a part of the ethics of business to overcapitalize and get all they can out of the people. The commissions come very largely to see things from the standpoint of the corporations and not from the people's standpoint.

Mr. ALLEN—Professor Parsons has attacked the railroad commission and the gas commission, and made certain statements in regard to the gas situation in Boston and the action of the commission. For seven years I was familiar with all that came up before them, and with every step of their procedure.

In the first place, the Bay State Gas Company, to which he refers as being overcapitalized and being under the control of the commission, was given its charter and granted its franchise prior to the establishment of the gas commission. Over its capitalization the gas commission had absolutely no power. In reference to the capitalization inside and outside the state, I would like to ask any one how it is possible to prevent putting the stock into the hands of trustees located in another state if the corporation sees fit to do so? So far as the commission in Massachusetts was concerned, it never recognized any stock except that issued under its authorization, and it never authorized the Bay State Gas Company of New Jersey.

Now, in regard to the refusal of the commission to show their returns. The commission drew up a statement covering all the essential details of gas manufacture, based on returns drawn up by the English Board of Trade and modified to suit American conditions. From those returns, in order to facilitate matters in the office, I drew up a blank on which I arranged that cost at so much per 1,000 cubic feet, the data from which this was made being given in the report, and in this form it was put on the last page of the blank; the clerks in the

office carried out the computation per thousand cubic feet. When the gas commission was asked for this report by Mr. Williams, one was handed him with the last page torn out, but the page that was torn out was that containing the computation per thousand cubic feet; and every figure as to the cost of distribution or manufacture that the office had was handed to Mr. Williams, the computation merely was not handed to him. On the strength of that he set up the claim he makes to-day that the commission mutilated the return. This page of the return, which followed the sworn affidavit of the company, formed no part of the return, but was merely an ordinary computation made by one of the clerks.

Mr. BRANDEIS—I want to say one word more in support of Mr. Allen, and particularly to call attention to this. The gas situation has nothing whatever to do with the railroad situation. It has not a superficial resemblance with the street railway situation. The gas commissioners have very different functions from the railroad Commissioners. That anything should be said which reflects even indirectly upon our railroad commissioners seems to me an act of extraordinary injustice. Every time, practically, when questions have come up in our community—great questions as between the public and the railroads—as in the instances to which I referred, when the greatest corporation politically undertook to secure rights, the railroad commission has shown itself not only cognizant of the facts, but with the courage to act, and it has adequately dealt with the situation. The railroad commission has always consisted of men, or a majority of men, who, by their conduct in that position, have earned almost universal approval in the community. The idea that our railroad commission has not done justice by the people, has not protected the people's interests, will not find support by any class of people in our community. In all the years in which I have watched its operations, I have never known the charge to be publicly made that the railroad commission fails, in deciding street railway matters, to protect the interests of the public. If such charge were made, it could be readily refuted. Of course, people have differed, and differed repeatedly, as to the conclusions which should be arrived at upon the questions involved. The presentation of facts which I have made in regard to the control in Massachusetts of the street railway situation may appear roseate, but I believe that nothing can be alleged in the way of facts to show that such control does not exist, or that the existence of it is not recognized and respected by street railway companies.

Mayor SULLIVAN, of Hartford—It would appear to me, after listening to what has been said, that it has been established beyond a doubt that municipal ownership is feasible and practicable, and yet there is something which has not been brought out which appeals to me more strongly than anything which has been said. The public is not enlightened as we are who are here to-day. Some method or system should be adopted for the presentation of the facts and benefits of municipal ownership to the great masses of people, who, after all, are the ones who make all things public successful or unsuccessful. In the short space of time that I have been connected with the municipal government of Hartford, I have found many citizens favorable to municipal ownership of public utilities. Men of high standing in our community, men who, impressive by their utterances, would talk to me in the privacy of their own libraries, but when it came to making public their utterances, were always unheard.

It would seem to me that the views set forth by my friend from Connecticut [Mr. Fox] should have no weight with our citizens. In explaining political pulls,

and there are some pretty strong ones in the state of Connecticut, and one would have to give a little study to the conditions there, it is the same feeling that people wish to be unheard. I have seen the most important measures come before legislative bodies and go through without a single person appearing against them. Yet in every local community you would hear a number of utterances against the corrupting influence which the company used to induce the legislators to make such law in their interest. Now, it would seem to me that in the case of so-called piratical bills, local pressure should be exercised, and that we should begin down at the bottom, and that can only be accomplished by a campaign of education.

Many who are firm believers in municipal ownership do not want to pledge themselves at this time—cannot give any good reason why they do not wish to be pledged. If there was an attempt made to educate the common people and the men who are elected mayors, aldermen and legislators, and they were made to see that municipal ownership was practical, there is no reason why it should not be just as practical here as in Liverpool. When we wanted to get a warden for our city prison, we sent out and we got the best one we could find, and I see no reason why the same principle should not be adopted in every locality.

It is the duty of every man who believes in municipal ownership to instruct some one else. Political pull will never be destroyed until these franchises are taken from the corporations and put where they belong—in the ownership and control of the public.

Professor CHARLES SPRAGUE SMITH, of the People's Institute—I did not wish to speak at all, because I feel myself uninformed, but I do wish to say a word in regard to the general position taken by Mr. Fox. His basis of assumption was that over against the English people, our people are not to be trusted, and that we are to continue private operation of public franchises until the people are brought up to that point where they can be more fully trusted.

The first question that I would like to ask in reference to this, and I wish that some one who is competent to answer this question would give the answer, is whether, under the teachings of such men as Mr. Addicks and several others, the people are going to be politically and mentally bettered than under a different system?

As to some things I can speak with knowledge. It is within the knowledge of many who are here that my life is spent practically entirely with those who are called the masses of the people, that I know their intimate thoughts, that I know their character, the sweep of their affections and desires, and that I know them not only *en masse*, but I know them as individuals. I, therefore, affirm from that knowledge that the very basis upon which the whole of the remarks of this gentleman are based is wrong. People become trustworthy in the measure that you trust them, and if you would educate and prepare them for larger responsibility, you must show an increasing confidence in their ability to assume those larger responsibilities.

As to their desires, the masses of the people in this country are convinced that it should be, nationally and municipally, democratically governed, and they are determined that it shall be.

Dr. BEMIS—I wish in justice to Professor Parsons' statement in regard to the railroad commission to make a statement, since I was personally acquainted



with the things referred to. As to the lease of the Boston and Albany to the New York Central Railroad three or four years ago, Professor Commons and I drew the resolution which the legislature of Massachusetts passed, calling on the railroad commission for its report, and asking, among other things, that it report on discriminations to shippers by the Boston and Albany, for in its reports for years there had been no reference to such things. We believed that that the whole state was honeycombed with discriminations. The commission made a report and admitted that discriminations existed, varying more or less between the shippers; but they attempted to show that there was practically no discrimination between two large shippers, but merely between large shippers and small shippers. There was no publicity with regard to these discriminations, and one might naturally be suspicious whether shippers similarly situated were treated exactly alike. That report was suppressed in the papers, and yet it was a most remarkable report. It did not give all the information we wanted, and I went in company with others to prominent merchants. Many of them admitted they were getting lower than the regular rates, and if they were subpoenaed by the legislative committee, they were prepared to take oath to that effect. We asked the legislative committee to call them, but they did not. We went to the Boston and Albany, and one or two officials said, on condition that their names should not be quoted, that lower rates were given some people without apparent rhyme or reason. We believed that the commission was ignorant of the extent of these discriminations, though they never inquired into it, and that its report would have been more of an indictment if it had had the facts.

Finally, the commission through one of its members acknowledged to the committee that it did not have the information about discriminations and had turned the matter over to the railroad official and had made his *ex parte* report that of the commission without any acknowledgment. That I know to be absolutely correct, as Professor Parsons stated. I do not imply that the commissioners were dishonest; I do imply that they were ignorant, and that it is an indication of the tendency of commissions not to probe to the bottom, except as they are spurred on to do it.

Professor PARSONS—I do not wish to be misunderstood in regard to the railway commissioners. I have the very highest respect for them, and also for the gas commissioners, but they are struggling under great difficulties. There are spots even on the sun. The railway commission of Massachusetts is as good as we are likely to get in the way of commissions; but the secretary of that commission admitted to me two years ago, I think, that the capitalization in Boston of the street railways was at least 50 per cent. more than the actual values. Under the laws of Massachusetts it is possible for the capitalization to be doubled, because, as Mr. Brandeis told you, they can have stock equal to money paid in, and then have an issue of bonds subsequently.

Mr. BRANDEIS—Not unless it is needed.

Professor PARSONS—But suppose you put a million dollars into your plant, and as that capital disappears you issue bonds. You can at least double your capital.

Mr. BRANDEIS—Not until the railroad company—

Professor PARSONS—I beg your pardon. It is possible for it to be doubled. The secretary of the commission stated to me that it was at that time actually 50 per cent. more than the actual value. Now, outside of Boston, with the small companies, the capitalization is actually less, as Mr. Brandeis has told us, while in Boston, with the big companies, it is 50 per cent. more.



In regard to revocable franchises, that is the law of Massachusetts, but it is practically a dead letter. In Boston, for example, suppose there were a movement to revoke the local franchises of the street railway corporations. You could not do it, because they have great influence with the revoking body, while the people have very little control. Mr. Brandeis knows (he is one of the most honorable men in Boston and I know he will admit it) that it is not safe to leave the big corporations and the Legislature of Massachusetts alone together. It is only through the efforts of public spirited citizens such as Mr. Brandeis, and the placing of men like Governor Crane in the chair, that you can hold the corporations down. It is not possible for the railroad commission to do it, although it is the best commission I know of. It has done very well in a number of cases—it has been compelled to do well by the watchfulness of influential men, and I think it has been glad to do well in these cases; but it cannot stop the corporation work in the legislature, and it does not always attend to its own business very well.

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THURSDAY MORNING SESSION.

Mr. Wallace Macfarlane, President of the Reform Club, in the chair. Mr. John Martin, secretary.

Municipal ownership of Electric Lighting Plants was discussed by Dr. Victor Rosewater, editor of the *Omaha Daily Bee*, who favored municipalization, and Lieut. James Blake Cahoon, Secretary of the National Electric Light Association, who opposed it. (Their papers appear in this issue.) The general discussion was opened by Mr. Edward B. Ellicott, City Electrician and Manager of the Municipal Electric Lighting Plant of Chicago, who spoke upon:

CHICAGO'S EXPERIENCE WITH MUNICIPAL LIGHTING.

BY EDWARD B. ELlicOTT.

The most important point on which advocates of municipal ownership and private companies disagree is that of depreciation. Let us see how much consideration is given the question of depreciation when the interests of a private plant are concerned. The following statement is copied from a recent prospectus for the sale of bonds issued by a company organized in Chicago:

Capital stock authorized and issued.....	\$500,000 00
First mortgage bonds outstanding.....	250,000 00
Reserved in treasury.....	100,000 00
Authorized .....	350,000 00

Then follow the names of the officers and directors, and among them appear the names of men standing high in electrical and business interests. The statement of earnings for the past year is reported by expert accountants:

Gross earnings.....	\$55,902 87
Operating expenses.....	37,227 92
Net earnings.....	\$18,674 95

This is not a very large earning for a \$750,000 corporation, and if a depreciation charge of five per cent. is added, the company has run far behind and there has

been no return on the investment. The ever ready expert accountant estimates that under new conditions the statement should thereafter be as follows:

Net earnings.....	\$25,156 30
Interest on \$250,000 5 per cent bonds.....	12,500 00
Surplus .....	\$12,656 30

Still no consideration is given to a depreciation charge, and if the popular five per cent. always found and charged against municipal statements is applied in this instance, a receiver for the plant should be asked for instead of a purchaser for the bonds.

This particular illustration is given for two reasons: First, to show that private companies do not apply a five per cent. depreciation charge to their own statements, and that consequently it is eminently unfair to charge such a per cent. to a municipal lighting plant; second, because the gentlemen who accept and publish this statement are competent authorities on lighting plants in general, and represent interests naturally opposed to municipal ownership of electric-lighting plants.

To give a practical illustration so that the importance of these points may be seen, we may take a comparatively recent report, made by expert accountants and published in MUNICIPAL AFFAIRS, upon the municipal electric-lighting plant of Chicago. The process of arriving at the cost of maintaining an electric-lighting service differs somewhat from that used by the expert accountants employed to make the statements of the private plant as quoted. In order that time may be saved, we may eliminate the following :

*First*—The actual amount of money expended in building, rebuilding and operating the plants throughout the term of years covered by the report are practically the same as shown by the department books.

*Second*—The amount of money the city would have paid for rented lights to duplicate the service furnished from the municipal plants is not disputed.

*Third*—The report states plainly that the existing plants operated by the city are equipped with modern machinery and are in good operating condition.

With these three important points agreed upon there remain but five to be argued:

*First*—The fixed depreciation charge of five per cent.

*Second*—The interest charge of four and one-half per cent. on the amount expended in building the plants.

*Third*—The amount of taxes assessed on the full valuation of the property.

*Fourth*—The estimated charge for water furnished by the public works department, without charge.

*Fifth*—Insurance charge.

*Depreciation*.—What constitutes depreciation? It is generally conceded to be "a fall in value," but it may be a "voluntary reduction of worth," or still further, a "belittling or running down of value, or conscious undervaluation." The best authorities give us these three definitions, and the report in question undoubtedly used the word as applied to a "belittling or running down of worth or conscious undervaluation," else why should a charge of \$478,575.64 for depreciation be assessed against operating charges, when in the same report appears the following paragraph:

"The steam and electrical equipment in the different electric-light plants now operated by the city is in all respects modern in character. The engines are of the cross compound condensing type, the boilers of large unit water tube type and the

steam piping is all double strength steel. Automatic furnaces are in use under the boilers in all of the stations. The dynamos are modern, large unit machines, the smallest having 100 lights capacity and the majority 160 lights capacity. The buildings are modern, of entirely fire-proof construction and in good repair."

Therefore, according to the statement, if there has been depreciation, we must have taken care of it in some way, either in operating expenses or in the total cost of building and operating the plants. This point is of great importance in the question of municipal ownership, for the reason that the City of Chicago started in the municipal ownership of its plants in 1887, since which time the character of apparatus used has changed completely, and the evolution in the lighting system has been greater than there is any possibility that it will be in the next fifteen years; yet the city has stood the cost of the great changes and is able to show a substantial profit in the venture. It is left to the judgment of fair-minded business men if the charge of \$478,575.64 for depreciation on a total investment of \$1,638,423.29 is, under the circumstances, a correct one. According to the estimated depreciation charge, the entire lighting system will have become valueless about twenty-five years from the date the plants were installed, but after an operating experience of fifteen years such relative depreciation is not visible even to the expert accountants.

*Interest Charge.*—In business ventures a return on the investment is the prime cause of the venture. A municipality, however, does not discharge the duties it owes to its citizens for the purpose of profit, but rather for the purpose of supplying that which may be necessary at the lowest cost possible. To meet the cost of public services a general tax is collected to be expended for the benefit of all. This tax is paid irrespective of how it is to be expended; it may be for fire protection, police protection, improvement of streets, or any and all of the public requirements. The apportionment for the purpose for which it is to be used is left to the city council. If that body decides to expend some part of it for the purpose of building an electric-light plant to light its streets, rather than to expend the same amount or more in renting the service from a private company, it is difficult to see wherein the city has made an investment on which interest should be computed. What the city has to show for its good business judgment and management is a clear asset, not a cumbersome investment.

It might be doubted that such a condition could be brought about in the ordinary transactions of a municipality; in fact the report in question does not consider this point at all and in not doing so ignores a practical demonstration. Let us see what practice has done.

From December 24, 1887, to December 31, 1902, the city of Chicago paid out of the general tax levy, or other moneys not of a special tax character, the sum of \$3,400,663.05 in building, rebuilding and operating its electric lighting plants. It has furnished service which, if rented from private companies, would have cost the city \$3,535,875.50, and would necessarily have been paid for with money derived from exactly the same sources. Under these circumstances, can any man of common sense reconcile an interest charge against the amount expended in building and operating the plants when more than that amount would have been expended in renting the same lighting service?

The expert accountants state in the report that the amounts given for "cost if rented" were received from the city electrician. The impression is left that no other figures were given, but other figures *were* given, computing the interest on the amounts that would have been paid for such rented lights, and the total amount was used as a proper offset to the interest charge computed by the

accountants on the money used in building and operating the plants. It did not serve their purpose to take this interest charge into account, as it nearly balanced the interest charge they had placed against operating expenses.

If an interest charge is assessed against the amount invested in building and operating an electric lighting plant, the same rate of interest should be placed against the cost of rented service that the municipal plant renders unnecessary. Not only does the report fail to give such consideration, it even compounds the interest yearly against the cost of building the plants. Why not compound the interest against the proportionate amount required for renting lights, and thereby make a true financial comparison.

Mr. Cahoon has just stated, criticising my figures, and the report of Haskins & Sells, in his attempt to show that the Chicago plant has been run at excessive cost:

"Interest speaks for itself. But in this estimate of the cost of a lamp, one item is omitted. *Bonds have been issued to pay for the plant*; what is going to happen when these bonds become due? No provisions have been made to redeem them at maturity through a sinking fund. Should not that be added? I think I may safely say that it should, or else we accuse the city of bad financiering and of doing an injustice to future generations. The total outlay for the plant up to January 1, 1898, was given as \$785,235.20, or a cost per light of \$546.06. Assuming that this was paid for with bonds at par, and the bonds were to run thirty years, we might provide for a sinking fund of  $2\frac{1}{2}$  per cent. per annum, which would be \$13.65 per lamp per year and would bring the lamp cost up to \$168.86. At that time Chicago was paying the Edison Company on its underground system \$137.50 per annum, and on its overhead system \$105 per annum."

The fact is that *no bonds were issued* by the city. No further reply is necessary.

*Tax Charge.*—It is true that the property constituting the lighting system would have been taxed if it had been owned by a private company, but not upon the basis estimated. If a private company engaged in a like business paid \$67,000 a year on a \$10,000,000 plant, is it fair to charge against the city \$18,603.19 for a similar period on an investment of \$1,159,847.65? The loss to the city in taxes could not be any more than proportional to the amount actually paid by a private company, and for this period would have been about \$7,770.98, instead of \$18,603.19, as estimated. It is fair to assume that the same average error exists in previous years, and that the tax estimate is over 58 per cent. too high.

If such a charge as lost taxes on city property is to be considered, why not apply it to all city property—water systems, school property, fire apparatus, vacant city property, etc.? Any one advocating that such requirements be considered would be ridiculed by the press and public, but no one seems to consider that the lighting of a city is one of the most important services that is rendered to the public. If the plants were used for any other purpose than furnishing a necessary service that otherwise would be rented from private companies, a tax might be considered.

*Water Charge.*—The department of public works has furnished to the lighting bureau the water required for steam purposes; the amount used varied each year, and at this time it is impossible to state accurately how much such service cost the city, or what a private company would have paid for it. The report does not say on what basis the estimate was made. Neither does it state why the charge is varied, as follows: 1897, \$6.79; 1898, \$8.23; 1899, \$5.42; 1900, \$4.14 per light. Why should the charge be \$1.44 a light greater in 1898 than in the preceding and succeeding years? The city engineer's office estimated that it cost the city \$9,000 last year to supply the lighting department with water, and as an

offset they received from the lighting department the service of sixty-eight arc lamps, that to have rented would have cost them \$9,350. It is difficult to see how the city has lost anything in this transaction, or where the cost to the citizens has been increased. It is practically an even exchange, and would make but little difference in the statement of either department if bills were rendered for the respective amounts involved. The only criticism to be made on the manner in which the charge has been considered in the report is that care has been used to estimate the amount due the water department, but no attention has been paid to an earning of the electric lighting system. Consequently the charge is not correctly made nor the true facts presented.

*Insurance Charge.*—Municipalities as a rule carry their own insurance. There is no law in the statutes nor in any business practice against such use of judgment on the part of a municipality. In this particular instance the plants are admittedly of fireproof construction and are not dangerously exposed by adjacent buildings. The charge of insurance is not more applicable in the estimated operating expenses than would be a charge for watchmen to prevent fires. In this case it serves as an illustration that there has been a decided disposition to load the operating charges in every possible manner.

To place the matter in the worst possible light, let it be assumed that the accountants' figures and estimated charges are correct, then add the interest yearly to the total amounts expended in operating and building the plants, treat the cost of rented service the same way and see what is the result of such comparison. The total amount chargeable to the municipal plants would be as follows:

Operating expenses, plus interest yearly.....	\$1,806,817 39
Estimated charges (depreciation, interest, etc.).....	1,112,932 79
Total amount of money involved.....	\$2,919,750 18
Rented service, with same rate of interest charge yearly.....	3,103,034 74
Difference in favor of municipal ownership.....	\$183,284 56

Thus, it will be seen when the two amounts involved are fairly compared, even with all the charges that could be made against the municipal plant added, the city has still a clear profit of \$183,284.56. It has in its possession a lighting plant that in 1902 saved the city an expenditure of \$283,628.49, which amount represents the difference between the cost of rented service and the total cost of operating the present municipal plant.

What would a private company do if they owned a plant capable of making this amount of money? If we may judge by the business policy of the private company whose statement has been quoted, they would immediately issue bonds to the extent of \$3,750,000, claiming the plant was worth it, because it earned interest thereon. It is worth just as much to the city, for if the plant was owned by a private company the city would have to pay the rented prices that would enable the private company to pay the interest on the \$3,750,000 issue of bonds.

Two years have passed since this report was made and the statement as compared with that of 1900 is greater still to the disadvantage of a rented service basis. The municipality, however, is content to place the question before the public in the simplest manner possible, and it is as follows:

Rented service for 15 yrs would have cost.....	\$3,535,875 50
The building, operating and maintaining the lighting service has cost in actual money.....	3,400,663 05
Actual expenditure saved.....	135,212 45

Perhaps a comparatively small amount of money has been lost in taxes, and there might be a small balance due another department for water, but it could not be maintained that such charges, no matter how invested, could equal the present earning capacity of the municipal lighting plants. No other charges, such as depreciation and interest need be considered; the interest charge is canceled, as the relative amounts involved are practically equal, and we may ignore the fixed depreciation charge by considering that whatever may be the condition of the lighting system to-day it represents a clear asset of the city, with an annual earning or saving capacity of \$283,628.49.

The venture of municipal ownership in the street lighting service in Chicago is a practical demonstration of what has been done under varying conditions throughout a period of fifteen years, and when the results are considered and compared with results that would have been secured by renting the same service, no intelligent and fair-minded man will deny that the venture has been and will continue to be profitable.

Let us cease all argument on theoretical operation of lighting plants and compare our relative practical results for corresponding periods of time, publish the cash cost of furnishing service, allow the same relative amounts for taxes and depreciation, and give the general public a practical comparison of private and municipal operation. Those who represent private electric-lighting interests dare not set a date when they will produce in public a true statement of their operating costs and fixed charges, as carried by them, to be used for the purpose of comparison with the actual costs of municipal lighting plants, and the fixed charges it is claimed should be made against them. If the representatives of private lighting interests are sincere and honest in their contentions that municipal ownership of electric lighting systems for street lighting purposes is a failure they will hasten to accept this challenge. If they do not accept, may we not assume that the practical results of fifteen years of municipal operation by the City of Chicago, as herein given, stands without contradiction?

The discussion was continued by Mr. A. L. Pierce, manager of the Wallingford, Conn., Municipal Electric Plant, who spoke on:

#### MUNICIPAL LIGHTING IN WALLINGFORD, CONN.

By A. L. PIERCE.

For several years prior to 1895 the project of a municipal electric-lighting plant had been agitated in the press and in nearly every public meeting. There was a universal sentiment among the people, with the exception of a few who had interests at stake in the local gas company, that such a plant was a necessity and that the franchise was too valuable to be abandoned to private enterprise. The failure of the local gas company to take advantage of the electric franchise given under its charter of 1881, and the unsatisfactory service it furnished, strengthened the sentiment.

Anticipating the possible failure to secure special charter rights from the legis-



lature, the friends of municipal ownership caused a special borough meeting to be held February 12, 1895, to vote on the proposition to establish a borough lighting plant under the public act of 1893. There were 96 per cent. of the votes in the affirmative. At a subsequent meeting held May 23, 1896, 99 per cent. were in the affirmative. There was some opposition, however, and it was not until 1898 that the borough officials were favorable to the construction of the plant. After further delay, careful investigation and report, a public meeting of the voters directed that the borough proceed to construct its plant, which was supported by 81 per cent. The meeting also provided for the necessary funds by authorizing an issue of \$45,000 twenty year bonds, bearing interest at  $3\frac{1}{2}$  per cent., the bonds selling at a premium of \$1,560.

The plant was completed and started on January 1, 1900, with 71 arc street lamps and about 250 commercial incandescents (16 C. P.). The wisdom of the enterprise was proven after the plant had been in operation less than four months, for a syndicate of New York men offered to buy the plant at \$80,000, and to place a suitable bond to keep the prevailing low price, both to the borough and to commercial consumers. The offer was rejected, and the account for the year ending July 31, 1902, shows the plant to be in successful operation.

*Income.*

Arc lighting.....	\$5,990 28	
Incandescent lighting (commercial).....	11,145 54	
Interest and rental (pole).....	24 03	
		<u>\$17,159 85</u>

*Operating Expenses.*

Interest on bonds.....	\$1,925 04	
Maintenance .....	772 84	
Expense, arc lamps.....	205 41	
Labor .....	2,053 81	
Salaries .....	1,373 25	
Fuel, oil and waste.....	4,826 37	
Boiler insurance (\$10,000).....	33 36	
Building insurance (\$25,000).....	143 40	
Liability insurance.....	187 20	
Miscellaneous expenses.....	597 46	
		<u>12,118 14</u>

Profits for the year ending July 31, 1902.....	\$5,041 71	
Charge off 5 per cent. depreciation on total investment, \$54,363.71 .....	\$2,718 18	
Less maintenance on equipment.....	772 84	
	<u>\$1,945 34</u>	
Charge off 5 per cent. profit on \$54,363.71.....	2,718 18	
		<u>4,663 52</u>
Net profit.....	\$378 19	
Add interest on \$3,000 loaned from earnings.....	91 00	
		<u>\$469 19</u>

From the above it will be seen that we charge the following direct to operating expenses: Insurance of all kinds, interest on bonds (these accounts the opponents of municipal ownership claim that most municipal plants do not so charge), also a depreciation of 5 per cent. on the whole investment less amount actually paid for maintenance. We also have taken 5 per cent. profit on the entire investment, and still have a surplus of \$378.19. Allowing that we were a private company, with like amount actually paid in by stockholders, the amount \$1,925.04 would be a dividend of  $3\frac{1}{2}$  per cent. plus the 5 per cent. making an easy  $8\frac{1}{2}$  per cent. dividend, not taking into account the extra surplus of \$469.19 for the year. It will be seen that we have every reason to be proud of the venture. The price charged for a most excellent service is ten cents per K. W., street arcs burning every dark night until 1 A. M.

Analyzing the year's showing by the standard adopted by the League of American Municipalities, the cash cost per arc light per year to the borough after including interest and depreciation at 7 per cent. would be \$32.87, or 2.05 cents per arc lamp hour.

The statement of assets and liabilities, as found by the city auditors, shows assets amounting to \$67,851.13. The liabilities are as follows:

Bonds .....	\$55,000 00
Interest on bonds .....	1,098 60
Ledger accounts outstanding .....	699 46
Depreciation, 1901 .....	\$2,250 00
Depreciation, 5% on \$54,363.71 .....	\$2,718 18
Less amount charged to maintenance .....	772 84
	<hr/> 1,945 34
	4,195 34
Surplus, 1901 .....	\$3,670 36
5% profit on \$54,363.71 .....	\$2,718 18
Total gain, 1902 .....	469 19
	<hr/> 3,187 37
	6,857 73
	<hr/> \$67,851 13

The receipts increased 24 per cent. during the last year.

Population of lighting area .....	7,000
Total number of commercial incandescent lights .....	6,800
Total number of commercial consumers .....	300
The total output of station K. W. for the year was .....	255,785
Average watts per pound of coal burned .....	106.8
Average pounds of coal consumed per K. W. ....	9.36
Average cost per K. W. ....	\$0.047
Average cost per K. W. for fuel .....	.0182
Income per ton of fuel consumed (coal at \$4.19 per ton) .....	9.87

The plant is under the control of three commissioners, one being appointed by the Warden and Court of Burgesses each year for a term of three years. The commissioners place the management of the plant in the hands of the superintendent, and all matters pertaining thereto must pass through him. Politics is not allowed to interfere in any way; the employees are selected by merit only, and not by residence.

It has been said that where municipalities have undertaken the manufacture and distribution of electricity it is usually done at the instigation of interested parties

who would profit thereby. I am strongly of the opinion that most municipalities have undertaken operation because of the unsatisfactory service and arbitrary manner in which they have been treated by the private companies, and that the companies have no one to thank for the strong movement for municipal ownership but themselves.

Mr. Frederick F. Ingram, Commissioner of Electric Lighting, Detroit, then dealt with the History of the Detroit Municipal Plant:

#### MUNICIPAL LIGHTING IN DETROIT.

By FREDERICK F. INGRAM.

Detroit's municipal electric-lighting plant has been in operation seven years—since 1895. Except Chicago, it is the largest municipal plant in this country. Its founder was the late Governor Pingree, at that time Detroit's mayor. It is managed by a non-salaried commission of six, appointed by the mayor and confirmed by the council, one member retiring each year. This is my fifth year on the Board.

Under contract—private lighting—Detroit paid from \$239.94 to \$128.87 per 2,000 C. P. arc light per year. The last contract lighting was at the rate of \$132.41. Under municipal ownership, the cost, including interest at 4 per cent., depreciation and lost taxes, has steadily declined from \$100.50 the first year to \$63.82 for 1902. Depreciation is figured at 3 per cent. on the entire investment. Our experience demonstrates that this is ample. In the first place, real estate and conduits, on which there is no depreciation, amount to \$268,504.59, or one-third of the entire investment of \$802,438.93. In the second place, 7 per cent. on incandescent plant, arcs and switches, amounts to \$90,078.30, or 11.2 per cent. of the total investment. Steam plant, amounting to \$129,513.34, or 16.1 per cent. of the investment, is figured at 5 per cent. These are over three-fifths the total investment, and other items are figured at their proper proportion. Besides this, the charges for maintenance include many items such as replacing poles and wires and similar equipment on which the depreciation would be higher than 7 per cent. if they were to be charged to that account. These, however, are charged to operating account. Lost taxes are figured at the actual combined rate of \$21.23 last year for city, county and state taxes on an assessed valuation as placed by the city assessors.

As a mere business proposition, the municipal plant has proven a good investment for Detroit, for based on the lowest ten-year contract offer from a private company, it will have paid for itself in the next three years. The city will have both the service and the plant at no greater cost than would have been the service alone, had it been done by a private company. When the city plant was installed, the lowest bid of a private company was based on a ten-year contract, and was at the rate of \$102.20 per arc lamp. On the actual number of incandescent and arc lamps burned up to 1903, and the estimated number for the next two years, based on the average increase for several years, the total cost to the city would have been \$2,414,785.74. Under municipal ownership the cash outlay on the same service, including lost taxes, and estimating the next two years at the average increase per year, will not exceed \$2,250,000, a saving of over \$160,000, and the city will have besides a fully equipped plant worth at least \$800,000. This is an aggregate saving of about \$1,000,000 in ten years.

As regards interest, it can be computed only on the excess sum expended, which is greater in municipal operation for the first five years, but much less for

the second five years, the aggregate being less for the ten-year period. The difference in interest charge is not material and is more than offset by the greater efficiency of service (as, for instance, note outages reported) and its more equitable distribution, subject as it is under municipal operation to actual local needs, instead of "pull."

Moreover, a great improvement in the service has followed municipal ownership. For instance, the number of lamp hours reported out the last year of contract lighting was 86,426, while last year under municipal lighting, with 50 per cent. more burning, it was but 6,825. At the same time the light given is fully up to the standard, as confirmed by disinterested parties.

But the saving in cost and the betterment of service are the least of the advantages, in my opinion, that result from the municipal ownership of public utilities. Detroit's public plant pays the union scale of wages and runs on the eight-hour day. It has demonstrated that this can be done and at the same time improve the service and lessen the cost by removing a public utility from private exploitation, eliminating machine politics, and applying to it the business principles that govern ordinary competitive enterprises. That machine politics plays no part is shown by the fact that the number of employees has been reduced from 112 in January, 1895, to 105 in January, 1903, notwithstanding the output for the same period has more than doubled. The permanency of employment, too, is shown by the fact that 38 per cent. of the present staff have been in the service since 1895, 59 per cent. since 1898 and 76 per cent. since 1900.

Machine politics and superfluous employees can find no permanent lodgment in a municipally owned public utility of this character, because the cost and quality of the output are matters of public record, and economy, or lack of it, is easily demonstrated by comparisons with other establishments. Therein, there is a difference from the department of public works, the park board and such departments, where charges of prodigal expenditure are met by flat denial, and the real facts cannot be ascertained because there is no result of the labor which is susceptible of such definite measurement and comparison.

Because of this feature—eliminating political machine methods—the interest and ability of capable business men are enlisted on behalf of the public in the management of the enterprise, and a generous rivalry and emulation are constantly in evidence, each member of the board striving to outdo his predecessors in securing increased economy and improved service. In the history of the Detroit commission of six members, there have been but three so-called politicians out of thirteen appointments, and they have each resigned after a brief service, because, according to their own statements, they found that in managing a plant supplying a commercial product their prestige as politicians suffered, as there was no opportunity to reward their political followers.

In contrast with this, compare Detroit's experience with public lighting prior to the establishment of the municipal plant. The constant trickery and blackmailing between rival corporations, and the fruitless efforts to enforce the conditions of the contract, that absorbed the time of the common council, finally ended when an alderman, Protiva by name, in open council handed to the city clerk a roll of bills of \$200, alleging they were given him by the manager of the electric plant for his vote. This episode finally decided the issue in favor of the municipal plant.

That similar tactics still continue when private corporations perform public service is evidenced by the following verbatim report from the *Detroit Free Press*.

It says: "The Detroit City Gas. Co. has sent to each member of the common council a request to nominate a few men for employment. With each letter was sent ten blank tickets, the filling out of which by an alderman insured a job to the holder," giving in one bunch 370 jobs to the officials who have the power to compel the corporation to live up to or to exempt them from the conditions of their franchise contract, to amend the contract and to grant them new privileges.

I might give many other proofs from the experience of Detroit of the advantage of municipal ownership over private ownership of natural monopolies, but I will conclude by quoting from one who is perhaps the greatest living expert on such matters, Mr. Chas. T. Yerkes. He says: "No monarch of the civilized world has such power as the ownership of such public utilities as railroads and telegraphs confers upon the owners, and if we add to this, ownership of street railways, gas, electric-light and telephone companies, we have a country of monarchs indeed!" (*News-Tribune*, May 6, 1900.) Mr. Yerkes does not advocate what I have shown to be the relief from subjection to these monarchs, namely, municipal and government ownership of public utilities.

Intelligent and conservative citizens are beginning to see that improvement is impossible so long as the power that controls our policies profits most by the present generally bad conditions. Public ownership will transform these wealthy and selfish opponents into friends of good government, for they will then no longer be able to tax the people, but will be compelled to share with them the burden of taxes.

The results of municipal lighting in Detroit were also discussed by Mr. Joseph E. Lockwood, President of the Michigan Electric Company, Detroit, speaking as follows:

#### ANALYSIS OF MUNICIPAL ELECTRIC LIGHTING IN DETROIT.

By JOSEPH E. LOCKWOOD.

I am here as substitute for the Hon. William C. Maybury, Mayor of Detroit, to report on that city's experience in owning and operating its public lighting plant. As I am neither an advocate nor opponent of municipal ownership, I have endeavored to make the report an impartial one, keeping strictly to the records where they suffice and estimating on what I consider a conservative basis where it has been necessary to estimate at all. As the sources or basis of all data and conclusions are stated, the results shown can be checked by those who are interested in so doing from the records of the City Comptroller and the Public Lighting Commission.

The ten-year period began July 1, 1893, and will end June 30, 1903. It includes two years of preparation, seven of completed operation and one ending June 30, 1903, which is partly completed and partly estimated.

Detroit's experience with electric lighting for public use began August 1, 1883, when 22 arc lights were first tried as an experiment, with the result that the following year 300 arc lights of 2,000 candle power each were contracted for, to burn all night and every night, at an average cost of about \$240 per light per year. From then until the end of its last contract its use of electric arc lights steadily increased, and the price per light decreased, as shown fully by Table I. The last lighting contract entered into by the city with a private company was for three years, which expired June 30, 1893, the number of arc lights then in use being 1,279, and the average price per light per year being about \$129.

TABLE I.  
*Contracted for by the City.*

YEAR ENDING JUNE 30.	NUMBER OF LAMPS.	AMOUNT PAID.	COST PER LAMP.
1884 .....	24	\$3,649 53	\$152 07
1885 .....	300	71,982 00	239 94
1886 .....	382	91,570 97	239 71
1887 .....	565	115,490 26	204 41
1888 .....	608	117,370 18	193 04
1889 .....	702	128,062 78	182 42
1890 .....	719	137,937 30	191 84
1891 .....	1,031	133,716 55	129 60
1892 .....	1,168	152,282 70	130 38
1893 .....	1,279	164,830 91	128 87

*Contracted for by Public Lighting Commission.*

1894 .....	1,279	\$169,360 35	\$132 41
1895 .....	*	153,004 36	.....
1896 .....	†	28,796 41	.....

\* A portion of the city lighted last three months by public lighting plant.

† Entire city lighted by public lighting plant last nine months.

The "amount paid" each year is taken from the comptroller's records and covers the actual cash disbursements during each fiscal year ending June 30, which generally included the payment for light furnished during June of the previous fiscal year and omitted payment for light furnished during June of its fiscal year.

January 14, 1890, the late Hon. H. S. Pingree, then mayor of Detroit, began the agitation for a municipal lighting plant, and in his message delivered January 12, 1892, he gave an abstract of reports from eighty-eight cities in the United States showing the cost of public lighting in those cities, from which it appeared that the price paid in Detroit was greatly in excess of the average paid elsewhere. The contractors were also criticised for the poor character of service rendered.

This agitation took definite form in an act to amend the charter of Detroit, which was passed by the state legislature, and received the governor's signature March 18, 1893. It provided for the appointment of the public lighting commission, to consist of six members, by the mayor and approved by the common council. The appointments were duly made and approved. The act further authorized the common council to direct the public lighting commission to purchase and install a plant (at a cost not to exceed \$800,000) necessary to furnish the public lighting, provided, however, that the authority should not be exercised until the electors of the city had first voted in favor of so doing.

Meanwhile, acting under instructions from the common council, the comptroller had advertised and received a bid from a private company for lighting the city for various terms ranging from one to ten years, beginning July 1, 1893, as follows:



## RATE PER NIGHT.

TERM.	POLE LIGHT.	MAST ARM LIGHT.	TOWER LIGHT (4 TO EACH TOWER).
1 year.....	\$0 41	\$0 42	\$0 45
2 ".....	39	40	43
3 ".....	32	33	37
5 ".....	31	32	36
7 ".....	28	29	33
10 ".....	26	27	31

The 1,279 lights then in use were 408 "tower" and 419 "pole."

The city, under the charter, had no authority at this time to contract for lighting for a longer period than three years, and on the recommendation of the comptroller the proposal was rejected by the common council March 14.

At the next city election, April 3, 1893, the electors voted in favor of establishing a public lighting plant, and May 24, 1893, the common council directed the public lighting commission to purchase and install the plant and to contract for light until they could furnish it from the public lighting plant. The public lighting commission then entered into a contract for public lighting to continue from month to month until its plant could be completed at a rate which was about 11 per cent. higher than had been quoted on the three-year and 35 per cent. higher than quoted on the ten-year basis: 1,279 lamps (tower and pole) at an average cost of \$136.15 per year per lamp or \$174,137.85 *in toto* per year.

In May, 1893, an issue of \$600,000 4 per cent. bonds was authorized to pay the cost of erecting the public lighting plant, which issue was increased \$50,000 three years later. These bonds sold at a premium, the premium and accrued interest paid being deposited in the city's sinking fund. The first public lighting service was furnished from the city's plant April 1, 1895, and by October 1, 1895, the entire city lighting was furnished from the public plant.

I have compiled several tables to show the financial and statistical record, by means of which comparisons may be made and the actual results of municipal operation ascertained.

Table II. shows the cash receipts and disbursements of the Public Lighting Commission from July 1, 1893, to and including June 30, 1902, and the foot notes state the amount (\$25,058.73) paid during said period for lighting of May and June, 1893, which belongs to the previous fiscal year. This amount should therefore be deducted from the total receipts and disbursements of the Public Lighting Commission as shown. The \$25,000 received from contingent fund in 1894-5 was to offset this item. All the figures have been taken from the reports of the commission; each fiscal year ends June 30. In the first column are the figures for the whole period (1893-1902, inclusive), and in the second are those for 1902 only.

The receipts year by year were: 1894-5 \$972,539.27 (Bonds, \$600,000; taxes, 343,032.57; contingent fund, \$25,000; the remainder, miscellaneous); 1896, \$164,192.44; 1897, \$221,152.31; 1898, \$207,494.50; 1899, \$109,285.55; 1900, \$150,595.53; 1901, \$106,633.15; 1902, \$180,959.52. The operating and maintenance expenses were: 1894-5, \$10,223.87; 1896, \$99,740.21; 1897, \$110,141.38; 1898, \$99,713.18; 1899, \$96,665.03; 1900, \$90,087.73; 1901, \$99,094.62; 1902, \$99,087.16. Miscellaneous expenses were: 1894-5, \$352,663.31 (paid to private company); 1896, \$28,796.41 (paid to private com-

pany); 1897, \$9,576.14; 1898, \$16,223.93; 1899, \$6,167.08; 1900, \$20,616.94; 1901, \$12,249.65; 1902, \$10,072.13. Construction costs were: 1894-5, \$492,705.26; 1896, \$147,425.59; 1897, \$89,091.88; 1898, \$60,923.00; 1899, \$23,657.74; 1900, \$14,284.53; 1901, \$23,566.83; 1902, \$80,577.57.

TABLE II.  
Cash Receipts and Disbursements—1893-1902.

	1893-1902.	1902.
<b>RECEIPTS.</b>		
Contingent fund.....	\$25,000 00	.....
Bonds.....	650,000 00	.....
Taxes.....	1,317,332 14	\$153,328 00
Sale old material.....	5,985 86	452 00
Rental conduit and poles.....	8,556 17	2,786 53
Inspection department.....	15,911 75	2,783 75
Work done by other departments.....	21,646 57	7,514 08
Decrease in stores.....	3,143 32	62 19
Lighting public buildings.....	19,654 28	3,564 95
Accounts payable, increase.....	45,534 68	10,468 02
Miscellaneous.....	87 50	.....
<b>Total receipts.....</b>	<b>\$2,112,852 27</b>	<b>\$180,959 52</b>
<b>DISBURSEMENTS.</b>		
Operating expenses (1894-5 and 1896)*.....	\$109,964 08	.....
Operating expenses (1897 to 1902):		
Maintenance.....	102,311 68	\$14,406 56
Executive.....	51,528 75	8,033 87
Station.....	253,382 32	45,600 28
Lighting.....	179,633 15	30,364 57
Shop†.....	6,347 08	56 18
Injuries and damages.....	1,586 12	19 70
Miscellaneous:		
To private company for public lighting‡.....	\$381,459 72	.....
Increase in stores.....	7,155 16	.....
Inspection department.....	14,085 70	\$2,180 20
Foreign work.....	20,330 95	7,643 36
Decrease accounts payable.....	31,819 03	.....
Extra work for outsiders.....	1,487 16	220 70
Old material expenditures.....	7 00	7 00
Rental expenditures.....	20 87	20 87
Construction.....	932,232 40	80,577 57
<b>Total disbursements.....</b>	<b>\$2,093,351 17</b>	<b>\$189,736 86</b>
Balance to be carried forward.....	19,501 10	.....

\* The operating disbursements were not divided in the books of the P. L. C. during these years on the basis given for later years; consequently totals only are given.

† After 1898, shop expense was largely included in other accounts.

‡ This amount includes \$25,058.73 for May and June lighting, 1894, and \$9,082.15 for June lighting, 1895.

Table III. gives statistics of operation, which are the basis for determining what the amount of public light used during said period would have cost if obtained from a private company. In making up this table deductions have been made from the reported lighting service in annual reports of the public lighting commission for all electric service used in the public plant, and a further deduction was made for arc lights used at Belle Isle, which only burn until midnight. The average number of lights in use at Belle Isle is fifty. Of the total operating expenses for these lights

about 70 per cent. is fixed and 30 per cent. variable; so as these lights are run about one-half as long as the regular all-night public lighting service, the operating expense would therefore be 85 per cent. of all-night service, or equivalent to 42½ lights for all night. I have therefore deducted 8 lights from the average number reported in use at Belle Isle.

TABLE III.  
Statistics of Operation.

	ON JUNE 30.								
	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
<i>Service Connected.</i>									
Arc lights.....	*1,279	*1,279	*147.5 1,325.5	1,597	1,818	1,895	1,986	2,026	2,287
Incand. lights, 16 c. p.	....	....	2,175	2,787	3,624	4,513	6,281	6,548	11,375
Motors, total H. P.	....	....	....	....	....	....	3	16	55
Total K. W. equiv...	639.5	639.5	822	995	1,265	1,809.8	1,445	1,501	2,025
Total arc light equiv.	1,279	1,279	1,764	1,890	2,330	2,540	2,890	3,002	4,050
<i>Average Arc Service Operated.</i>									
From Private Co...	*1,279	*1,300	*147.5	....	....	....	....	....	....
From public plant..	....	79	1,288.5	1,556	1,736	1,852	1,947	2,019	2,118
<i>Electrical Output.</i>									
Arc K. W. H. ....	*2,424,345	*2,314,960 109,385	*235,631 2,392,826	2,702,222	2,960,632	3,267,815	3,313,328	3,461,219	3,659,806
Incand. K. W. H. (inc. motors).....	....	25,274	195,723	239,962	284,713	328,220	434,135	469,161	630,129
Total K. W. H. ....	2,424,345	2,449,619	2,824,180	2,942,184	3,245,345	3,496,035	3,747,463	3,930,380	4,289,935

NOTE.—The above is for public lighting only; deductions from service and output given in annual reports of P. L. C., having been made for lights used in public plant.

\*From private company.

Table IV., compiled from the annual reports of the public lighting commission, shows the arc lights used for public lighting, which I have transposed to the contract basis (on which bids were received by the city) which would have been in effect from July 1, 1903, had same been accepted.

TABLE IV.  
Statistics of Arc Lighting.

YEAR.	ARC LIGHTS REPORTED AS IN USE.*	AVERAGE NUMBER OPERATED.			
		Poles.	Arms.	Towers.	Total.
1894 .....	1,279	871	...	408	1,279
1895 .....	1,287	777	94	408	1,279
1896 .....	1,481	714	222	500	1,436
1897 .....	1,600	782	278	496	1,556
1898 .....	1,820	848	376	512	1,736
1899 .....	1,911	907	432	513	1,852
1900 .....	2,002	999	508	440	1,947
1901 .....	2,040	961	618	440	2,019
1902 .....	2,302	799	822	497	2,118

\* As explained in the preceding paragraphs, a number of lamps at Belle Isle Park are not used all night, and allowance has been made for these. Thus, if one wishes to know the net equivalent, subtract 8 from the number given here for the years 1895, 1896, 1897 and 1898, 16 for years 1899, 1900, 1901 and 15 for 1902.

Table V. shows what the cost would have been to the city for the public lighting service, as shown by Tables III. and IV., if the same had been obtained from a private company on a contract basis. We are peculiarly fortunate in having as a basis for the arc light rates used in this table an actual proposal received by the city for furnishing this service from a private company. Consequently the costs for the first term on the three-year basis, and for the whole term on the ten-year basis, are exact, excepting only that the rates as given are from said proposal "for lights in use during the whole term of the contract," while "for lights added during the term of the contract" higher rates would probably have been charged, as had been the practice under all previous contracts, which had charged from 5 to 30 per cent. increase, according to the unexpired term. Owing, however, to my inability to find the original proposal mentioned, I have made no allowance for such higher rates; therefore the cost to the city as given is probably below what the actual cost would have been by 5 per cent. or more.

The arc rates for the second and third terms on the three-year basis I have estimated at a uniform rate of reduction, which would bring the base rate (*viz.*, on pole lights) down to \$80 per light per year for the term beginning July 1, 1903; the latter figure is, in my judgment, the lowest base rate which would probably be now obtainable by the city from a private company had it continued on the contract basis.

The rates on incandescent and motor current used are based upon net prices "at the meters in buildings where current is used," for the first, second and third terms on three-year contract basis, of 12, 10 and 8 cents per kilowatt hour respectively. The average loss from switchboard in public plant, where the electrical output is recorded, to said meters, I have estimated at 30 per cent., which estimated loss, however, is, I believe, somewhat higher than the actual. This, therefore, gives us rates for the first, second and third terms, "at switchboard," of \$.084, \$.07 and \$.056. On the ten-year basis, I have figured a 10-cent rate "at building meters," which makes a 7-cent rate "at switchboard." As bearing on this question of incandescent rates, I would add that during the year 1900 the majority of the public schools in the city and other public buildings lighted by a private company showed an average net cost per kilowatt hour for current "at building meters" of a little over 13 cents. For the county building, which uses a very large amount of incandescent current, the best rate quoted by a private company about two years since was 8 cents net per kilowatt hour.

TABLE V.  
*Cost from Private Company on Contract Basis.*

FISCAL YEAR ENDING JUNE 30.	ON 3-YEAR BASIS.	ON 10-YEAR BASIS.	FISCAL YEAR ENDING JUNE 30.	ON 3-YEAR BASIS.	ON 10-YEAR BASIS.
1894.....	\$157,040 31	\$129,031 21	1899.....	\$224,727 95	\$209,669 25
1895.....	160,696 66	132,686 56	1900.....	210,594 48	225,044 95
1896.....	194,100 83	159,912 31	1901.....	219,599 47	234,730 07
1897.....	186,734 04	173,528 44	1902.....	239,115 17	257,177 78
1898.....	209,242 31	195,392 71	Total....	\$1,801,851 22	\$1,717,173 28

Table VI. shows investment account record from 1894-95 to July 1, 1902, the amounts given being actual charges to investment account, without any deductions for depreciation. The depreciation allowed and rate at which it is computed are also given in this table. As the plant started operating its first lights April 1,

1895, and assumed the entire city lighting October 1, 1895, I have figured depreciation from July 1, 1895, deducting from the total investment for 1895 the depreciation allowed for fiscal year ending June 30, 1896, then adding the amount invested during that fiscal year (Table VI.), the total being the value of investment for the beginning of the following fiscal year, and so on. The expenditures for investment account are not given year by year in the table, but were as follows: 1894-95, \$492,708.26; 1896, \$147,425.59; 1897, \$89,091.88; 1898, \$60,923.90; 1899, \$23,657.74; 1900, \$14,284.53; 1901, \$23,566.83; 1902, \$80,577.37; total, \$932,232.20.

The depreciation charges were: 1896, \$9,498.16; 1897, \$18,052.95; 1898, \$20,008.97; 1899, \$23,061.42; 1900, \$22,385.42; 1901, \$21,812.24; 1902, \$20,934.39; total, \$135,753.55.

TABLE VI.

Investment and Depreciation Account, 1894-1902.

	INVESTMENT.	DEPRECIATION.	
		\$ Per Annum.	Amount.
Conduits .....	\$95,174 63	0	.....
Cables .....	55,744 85	1	\$2,565 18
Real estate .....	63,125 00	0	.....
Buildings and wharf .....	110,204 96	1	7-384 52
Lines and poles .....	173,835 23	3	22,141 94
Towers and lamp posts .....	97,981 00	3	18,410 67
Electric plant, arc .....	71,164 23	8	21,803 50
Electric plant, incandescent .....	24,835 24	8	5,001 90
Steam plant .....	129,515 34	5	29,734 08
Railway tracks and scales .....	10,982 31	1	715 55
Machine shop .....	8,014 16	3	1,319 83
Arc lamps and switches .....	65,243 06	10	23,706 54
Belle Island lines, cables, lamps, etc. ....	26,412 19	3	2,969 84
Total .....	\$932,232 20	..	\$135,753 55

On this basis, the value of the plant July 1, 1902, was

Total investment .....	\$932,232 20
Total depreciation .....	135,753 55

Net value ..... \$796,478 65

Up to June 30, 1902, the sources of receipts for investment appropriations were: Bonds, \$650,000; taxes, \$282,232.20; total, \$932,232.20.

Table VII. shows the effect of municipal ownership of public lighting plant on taxes. The comparison on the ten-year contract basis shows that the savings in taxes to July 1, 1902, amounted to \$137,867.60, notwithstanding there having been expended from tax receipts for increase of plant the sum of \$282,232.20, as noted above. The figures also include the loss to the city during the two years of preparation, due to paying a short high rate to the private company that then furnished public lighting, instead of taking advantage of the lower contract rates offered on a three or ten year contract basis. This increased expense for lighting during these two years, even over the three-year contract rate, was \$20,091.48, while, as compared with the cost on the ten-year contract basis it amounts to

\$76,110.68. Therefore, the saving in taxes for the remaining seven years amounts to \$213,978.28 on the ten-year contract basis, or \$242,637.02 on the three-year contract basis.

TABLE VII.  
*Effect of Municipal Operation upon Taxes—1894-1902.*

	ON BASIS OF 10-YEAR CONTRACT WITH PRIVATE CO.	ON BASIS OF 3-YEAR CONTRACT WITH PRIVATE CO.
Paid P. L. C., from tax collections .....	\$1,317,273 41	\$1,317,273 41
Interest on P. L. C. bonds .....	216,000 00	216,000 00
Estimate lost taxes .....	46,032 27	46,032 27
Total tax equivalent. ....	\$1,579,305 68	\$1,579,305 68
Cost from private company .....	1,717,173 28	1,801,851 22
Decrease in taxes for certain years .....	\$321,188 17	\$306,633 68
Increase in taxes for certain years .....	183,320 57	84,088 14
Net decrease for whole period .....	\$137,867 60	\$222,545 54

TABLE VIII.  
*Effect of Municipal Operation upon Taxes—1902.*

	ON BASIS OF 10-YEAR CONTRACT WITH PRIVATE CO.	ON BASIS OF 3-YEAR CONTRACT WITH PRIVATE CO.
Paid P. L. C., from tax collections .....	\$153,328 00	\$153,328 00
Interest on P. L. C. bonds .....	26,000 00	26,000 00
Estimate lost taxes .....	10,335 19	10,335 19
Total tax equivalent. ....	\$189,663 19	\$189,663 19
Cost from private company .....	257,177 78	239,115 17
Decrease in taxes for 1902 .....	\$67,514 59	\$49,451 98

The estimated taxes lost to the city, public property being not assessed, are: 1896, \$4,404.16; 1897, \$4,829.93; 1898, \$5,779.33; 1899, \$6,141.72; 1900, \$7,483.94; 1901, \$7,058.00; 1902, \$10,335.19; total, \$46,032.27.

These figures for estimated lost taxes have been compiled, not from the assessable valuation of the plant of the public lighting commission (for whether or not a private company would have invested as large an amount without a contract covering a period even longer than ten years is a question), but from a more direct means of ascertaining this loss, viz., from the city's records as to the taxes that were actually paid by the private company which last furnished the city its public lighting, and which in all probability would have continued to furnish same had the city not installed its own lighting plant.

The company, I find, had a plant whose assessable value in 1892-93 was about \$250,000, and, according to its then manager, nearly two-thirds of its capacity was used for the public lighting service, operating 1279 arc lights. From this I find



the assessable value per arc light for said plant was \$130. I have multiplied that figure by the "average arc lamp equivalent" (Table III.) of public lighting service furnished the city each year, and found therefrom the probable assessable value of the plant. The tax rates used included city, county and state levies.

The foregoing figures do not include allowances for interest on the debit and credit tax balances from year to year, but as these would offset each other, I judge the net amount would be unimportant.

As receipts from taxes have been used not only for operation, but also for investment, it is necessary, in order to ascertain the net results to the city, to take into consideration all liabilities and assets as of June 30, 1902, as well as the saving in taxes already made. In doing this, the net decrease in taxes, which is the increased amount that would have been raised by taxation without imposing any burden in excess of what would have been imposed if the city had been lighted by contract, I have figured as having been raised and deposited in the city's sinking fund, together with the premiums and accrued interest paid on bonds issued, the fund thus formed to be available toward paying the bonded debt. This summary is as follows:

## SAVING ON TEN-YEAR CONTRACT BASIS.

<i>Assets</i> —Investment in plant to July 1, 1902.....	\$932,232 20	
Less depreciation .....	135,753 55	
	<hr/>	\$796,478 65
<i>Liabilities</i> —P. L. C. bonds outstanding.....	\$650,000 00	
Less cash balance, July 1, 1902.....	\$19,501 30	
Less sinking fund.....	35,905 52	
Less saving in taxes.....	137,867 60	
	<hr/>	193,274 42
		<hr/>
		456,725 58
Saving for nine years.....	\$339,753 07	
Plus loss of first two years.....	76,110 68	
	<hr/>	
Profit for last seven years.....	\$415,863 75	

## SAVING ON THREE-YEAR CONTRACT BASIS.

<i>Assets</i> —As previously stated, net.....	\$796,478 65	
<i>Liabilities</i> —P. L. C. bonds outstanding.....	\$650,000 00	
Less cash balance, July 1, 1902.....	\$19,501 30	
Less sinking fund.....	35,905 52	
Less saving in taxes.....	222,545 54	
	<hr/>	277,952 36
		<hr/>
Net liability .....	372,047 64	
Saving for nine years.....	\$424,431 01	
Plus loss of first two years.....	20,091 48	
	<hr/>	
Saving last seven years.....	\$444,522 49	

For the fiscal year ending June 30, 1903, thus completing the ten-year period, the following shows the estimated statistics, expenses and profit:

## STATISTICS.

Average number of arc lights operated.....	2,389
Incandescent lights (16 c. p.) connected.....	13,478
Motors, total H. P.....	83
Total K. W. equivalent.....	2,261
Total arc light equivalent.....	4,522
Estimated increase and motor output in K. W. H.....	715,400

## ESTIMATED SAVING FOR 1903.

	3-YEAR BASIS.	10-YEAR BASIS.
Cost by contract .....	\$264,880 20	\$289,047 15
Net expenses.....	144,168 17	144,168 17
	\$120,712 03	\$144,878 98

## TEN-YEAR RESULTS.

	3-YEAR BASIS.	10-YEAR BASIS.
Saving for 9 years as shown .....	\$424,431 01	\$339,753 07
Saving for 1903.....	120,712 03	144,878 98
Saving for 10 years .....	\$545,143 04	\$484,632 05
Plus loss first 2 years .....	20,091 48	76,110 68
Saving for 8 years' operation.....	\$565,234 52	\$560,742 73

From the foregoing it will be seen that on the basis given, but not including any additional investment, the entire plant will be a clear profit to the city by July 1, 1905, ten years from the starting of the plant, it will have saved the city of Detroit enough to retire its entire bonded debt.

The chair then introduced Mr. Walter S. Allen, of Boston, who spoke in opposition to municipal ownership of gas works. A paper by Mr. Alton D. Adams favoring municipal ownership was read by the secretary, owing to Mr. Adams's absence. These addresses are published in this issue. Dr. Bemis, superintendent of the Cleveland water department, opened the discussion.

Dr. BEMIS—I have taken the Haskins & Sells report as a foundation, but have worked it out a little differently from what has been done in either their report or in the paper of Mr. Ellicott. Beginning with the starting of the plant in 1887, I took the new investment or construction of each year, added thereto the interest at 4 per cent. on the previous year's investment and also the operating expenses of the year, and the allowance for water and taxes as given by Haskins & Sells. From this total I deducted the amount that the city would have had to pay to the private company for the same number of lights as determined by such lights as the city did hire. There was left the net investment at the end of the year to be applied as before in

connection with the next year's costs. The result is that the city in three more years will have entirely paid for its plant out of the difference between its operating expenses and what it would have had to pay a private company.

Lieutenant CAHOON—If the city had continued the contract with the company, would it not have used more lights?

Professor BEMIS—Mr. Cahoon has remarked that it is unfair in one respect, because, if the city of Chicago had continued to contract with the private company it would have used a larger number of street lights and secured a better bargain. I doubt the latter; the trend was not in that direction.

It appears from the above comparison that the public plant (taking no account of what has been done in the last year or two, and assuming no increased ratio, although there has been a great increase since Mr. Ellicott took charge) will be entirely paid for in three years more, even at this rate.

Mr. SCOVILLE—At what price did you figure the lights?

Professor BEMIS—In every case at what the city was paying the Edison company. The last year, I believe the operating expenses of the plant were \$277,374.08. Adding \$40,000 for water, insurance and taxes, we get \$314,000 as the expenses. If the current had been supplied by the private company, the cost would have been \$524,824, showing a net gain of \$210,463.

I wish to refer to one other electric light plant in this connection—that of Allegheny, Pennsylvania. I have lately secured from Mr. Hunter, who has been manager there since the start, and the plant has now over 1,400 arc lights, the entire cost of the plant since the start, including cost of operation, taxes, lost value of the water furnished, etc. Allegheny has also established quite an extensive incandescent plant for lighting public buildings. The figures are compared year by year with what the electric company would have been paid by the city had the city paid the same price for arc lights as Pittsburg. Pittsburg immediately adjoins Allegheny and therefore it affords an unusually fair comparison. I find that what the city of Allegheny has paid out, including every dollar invested in the plant, as well as the cost of operation and the value of the water and taxes, has been less than she would have paid at Pittsburg prices by \$58,000. The city now owns free of debt both an arc and incandescent system and has \$58,000 beside, according to that comparison.

Mr. Alton D. Adams gave very careful statistics before the Industrial Commission, and comparing the public electric lighting plants in Massachusetts with private plants of the same size, he showed that if the public plants had received from the municipalities the same rate per kilowatt hour as the private plants had done, the municipalities in Massachusetts that own their own plants (over a dozen in number) would have made 12.2 per cent. on their investment, not allowing for depreciation, while the private companies would have made 6.4 per cent. Yet you may think the private companies over-capitalized, although under the Massachusetts law they are not largely so. We were told yesterday how carefully capital outlay is regulated, except perhaps in Boston.

The question of depreciation has come up so often that I want to suggest how it should be met, viz., by a sinking fund which shall amount to the cost of the plant at the end of its probable life. Suppose we have a 4 per cent. sinking fund; assume that the life of the plant is only twenty-one and a half years (I think it is more than that); assume that at the end of twenty-one and a half years you have to duplicate your entire plant, land excluded, which is, of course, a very

uncalled for admission. The sinking fund in that case would only require a yearly investment of only 3 per cent. in the sinking fund, while if you allow twenty-eight years it will take only 2 per cent.

I would call attention to the fact that our municipal plants, except the smaller ones, have been handicapped by their inability to get local authority to do commercial lighting. No municipal plant in this country is allowed to do commercial electric lighting in any city of over 30,000, and that undoubtedly has handicapped the municipal plants. Yet Chicago, Detroit and Allegheny have had interesting experiences, as we have heard this morning.

Mr. Allen refers to Richmond, Virginia, as having a very large investment on the basis of annual sales. This is the first time I have heard of it. I have been in Richmond a great many times in conference with the management and have interviewed their bookkeeper. The fact is that the plant was entirely paid for out of net earnings sixteen years ago, and is now giving the city every year gas at a dollar, which is lower than the average in this country, and giving the city about \$75,000 in cash, together with free public lighting.

Reference was made to Philadelphia. Before the lease of the plant, gas was selling at a dollar, and the plant was earning cash equal to the amount of depreciation charged by Mr. Vanderpool, who is one of the best authorities on that subject in America, and was furnishing gas free for public uses. Now the only return to the city from the lease is a decrease of 10 cents per 1,000 feet in the price, or a tax of 10 cents which will ultimately grow to 25 cents in fifteen years from date of the lease, but the city could have secured this at once if it had had honest government. I will not, however, set up Philadelphia as a good example of public management. It is a horrible example, and its relations with private companies are scandalous. This very company which leased the public plant was previously supplying forty per cent. of all the gas used in Philadelphia and selling it to the city. I heard the engineer state on oath, and it is a matter of public record: "We always put in as employees the men recommended by the city council, and we as far as possible keep them there as short a time as we can, so as to give as many aldermen as possible as many favors as possible in a given length of time." I will not say that is true of all private plants, of course, but since we are talking of Philadelphia and speaking of municipal work, it is well enough to speak of the demoralizing effect of its private plants.

With regard to Great Britain. In Birmingham the chairman of the gas committee was, and perhaps still is, a gentleman whose father was the president of the gas company, and the town clerk of Birmingham assures me that as a member of the city council and the gas committee, he was taking as much interest in this voluntary service as his father had done as president of the private company. That has been the tendency throughout England. The public service has enlisted the enthusiastic support of private persons. Two and one-half years ago I had an opportunity to meet the leading representatives of the private plants in England and Scotland, as well as the managers of many public gas works. I asked every one of them to pick out for me the best six gas works in Great Britain, the most progressive, the most up-to-date, that I might visit them. Without exception, every one of the private engineers, who were five minutes before denouncing municipal ownership, named out of the six four municipal plants. They always put in Glasgow, Edinburgh, Birmingham and Leicester—municipal plants—and generally Sheffield—a private plant. They did not agree upon the sixth.

As to progressiveness, water gas was developed in England largely by private

managers, but its manufacture has been perfected largely by municipal engineers. Inclined retorts and charging machines were first developed by municipal plants. Prepayment meters have been most developed in public plants. In fact, to my great surprise, I found that while the labor question was the most difficult question the municipal plants had to meet, and in order to meet it they put in more improvements than the private plants, and were more progressive.

I found that true also of water works. You will find the best purification plants in municipal water works. They are ready to look into the future, which you don't find the dividend seeker ready to do to the same extent.

Comparing the thirty-one public gas plants with the thirty-one private plants in England and Scotland of towns of over 50,000 inhabitants, excluding London, Dr. Maltbie has brought out very clearly the fact that the number of consumers per thousand of population of the municipal plants is 202, and of private plants, 137. The tendency of municipal ownership is to produce a larger number of consumers. I have a comparison here between Leicester, Sheffield and Liverpool, which, however, I must omit.

I don't believe we ought to adopt public ownership of a competitive business, yet where a monopoly has developed of its own natural tendency, and especially where it is a monopoly conducted under the public eye, where you can easily see the mismanagement, and where its bookkeeping is the subject of comparison, as in the case of water works and electric works conducted under private control, you are likely to get better management than under unrestricted private management, where it is not conducted under the public eye, and where standards of bookkeeping are not so well developed. But I believe we will find in most cities a tendency to good government. In fact, it is harder, it takes more wisdom on the part of a city council in this country, to grant a wise franchise for twenty-five years than to run a municipal plant. It is far more difficult for private enterprise to look into the future. We had a brilliant illustration of that yesterday when Mr. Shepard spoke of the unwillingness of the Vanderbilts and the Goulds to put up that \$50,000,000 for a subway here in New York.

The CHAIR—I shall ask Mr. Bellamy, who has had charge of the street lighting in Liverpool, to give us some facts in relation thereto.

Mr. BELLAMY—I speak this morning in the capacity of city lighting engineer of Liverpool. In view of the statement in Mr. Porter's paper, read yesterday, that the British municipalities had been unable to show that any advantage had accrued to the public following the transfer of gas undertakings from private to public control, I should like to call your attention to the following:

The local authorities of Great Britain own 251 gas undertakings, with a capital expenditure of £34,045,442 (\$170,000,000). The average price charged for gas by the local authorities is 3s. 5d. (82 cents) and by the companies 4s. (96 cents)—a difference in favor of municipal operation of 14 cents per thousand cubic feet, with the further advantage that the average candle power of the gas supplied by the municipalities is 18.50 against 16.38 by the companies. Therefore, the gas supplied by the municipalities is 14½ per cent. cheaper and 12 per cent. richer than that supplied by the companies. Beyond these advantages, however, during the last year for which the returns are available, after meeting all charges of interest, sinking fund, depreciation, etc., the municipal authorities had a net profit balance of £414,091 (\$2,000,000).

I had a roving commission to travel throughout the length and the breadth

of the land and to make tests, and you may believe me that there is nothing in Mr. Allen's statement that the municipal plants do not comply with the statutory requirements. They go beyond them. In all towns where I have tested the gas the companies have been running very close on the statutory line and the municipal plants have been well beyond it.

Mr. ALLEN—I beg your pardon. I said the candle power claimed. I did not say "statutory requirements."

Mr. BELLAMY—I want to say that the most successfully managed gas undertaking in the world is that owned by the municipality of Widnes, in Lancashire, where they have always aimed at selling gas at the lowest possible price and no attempt has been made to secure a profit. The result is that, although they supply gas free to the public lamps, they are able to sell gas to small consumers at 1s. 4d. (32 cents) per thousand cubic feet, and to large consumers at 1s. (24 cents), the average illuminating power being 18 candles.

A DELEGATE—What is the size of the town?

Mr. BELLAMY—About 50,000 inhabitants.

In regard to electric lighting in Liverpool, the undertaking was purchased in 1895, the capital of the company at that time being £264,711 and the price paid by the municipality £436,474. The following figures will indicate the enormous growth that has followed the transfer, resulting from the general reduction in charges:

	LAST YEAR UNDER COMPANY, 1895.	MOST RECENT UNDER MUNI- CIPALITY, 1902.
Capital outlay.....	£264,711	£1,336,708
Units produced.....	1,185,964	23,186,083
Receipts—all sources.....	£35,414	£189,203
Working expenses.....	12,041	89,257
Gross profit.....	23,373	99,945
Percentage to capital.....	9.04	7.4
Provided for depreciation and sinking fund.....	£7,657	£39,112
Net profit.....	15,716	33,416
Working expenses per unit.....	2.44d.	.90d.
Average price charged for current per unit.....	6.88d.	1.9d.

The crux of the whole business is that the working expenses fell from 4.88 cents to 1.8 cents per unit, and the average price charged per unit from 13.72 cents to 3.88 cents under municipal management.

Mr. SCOVILLE—What is the common price of gas in Liverpool?

Mr. BELLAMY—2s. 8d. per thousand feet.

Mr. HALE—What do you mean by unit?

Mr. BELLAMY—Per kilowatt.

Lieutenant CAHOON—In the first place, in regard to the Chicago bonds, I got the information from two or three different persons in Chicago that there were bonds and electric bonds, and that the money for the purchase of the property was originally obtained by the sale of bonds. I am very glad to be corrected. I have corrected the statement in my paper.

In regard to the question of depreciation, I beg to differ from Mr. Ellicott very decidedly in regard to the account being taken care of by the Chicago plant to-day. It is taken care of, to the same extent, by all modern up-to-date plants, although some private plants do not, I will admit. There are rusty old plants



among the private plants, the same as in some municipalities. But the importance of the depreciation account is very great. Only yesterday I was called in by a banking house to advise in regard to the taking of a very large bond issue, about \$10,000,000, and this very question of depreciation came up. I recommended that the bonds be not taken, simply because they had not included depreciation in any shape. If depreciation had been figured in at all it would have equalled 2 per cent., and that would have made such a difference in the showing that they would immediately have turned down the proposition. Quite a number of these propositions such as Mr. Ellicott has outlined have been put on the market, but the tendency among banking houses is to be very conservative in passing upon a statement and to take that item of depreciation more and more strongly into account before putting out their bond certifications.

In regard to the investigation of cost, I want to say that three years ago, in Syracuse, I made for and on behalf of the National Electric Light Association the assertion that we would pay one-half of the expenses of accountants to investigate the question of municipal ownership and its cost. I have repeated it in Detroit, and the National Electric Light Association stands ready at any time to meet any people who will take up the question of the actual cost of municipally operated plants and compare it with the cost of operation of private plants.

Professor PARSONS—Will you show us your own books?

Mr. ELLICOTT—Will you give us your own books to see, the same as we have done?

Lieutenant CAHOON—It was done in Worcester, it was done in Ogden, it was done in Utica. They offered to let the city go right in and look at their books, to show every detail, and after the city went through the books they made a contract with the company to do their lighting for the term of five years, and that knocked municipal ownership right then and there in the head.

Mr. Ellicott states, and Professor Bemis has made the same statement, that rented service cost more than municipal service in Chicago. They say that if the cost were put in at what private plants asked for a similar number of lights, the cost of municipal ownership would be less, and further than that, that the private plant, if there were no competition, would ask more. I question those statements very seriously. I know my own experience has been to the contrary. The tendency has been for the private plant to lower the price just as fast as it possibly could, and it will treat the city always better than it will—

Professor BEMIS—That would not apply to my comparison of Allegheny and Pittsburg, because I took the Allegheny price and compared it with the Pittsburg price.

Lieutenant CAHOON—I don't question this: If a private company can get a hundred dollars a light, they will do so. They are not in business for their health or charity; they are in business to get all the money they can out of it.

Mr. MILES—Doesn't that give it all away? You say you get all you can, no matter about the people.

Lieutenant CAHOON—There is not an electric light company in the country that would not be glad to come under the Massachusetts law. Mr. Ellicott said there was not a single private company that took into consideration depreciation. There is in Massachusetts. The law requires them to put in 5 per cent. for depreciation.

Professor BEMIS—That is only for public plants.

Lieutenant CAHOON—No; for private electric plants.

Professor BEMIS—You are honestly mistaken; that provision is regarding municipal plants.

Lieutenant CAHOON—People in Massachusetts have repeatedly stated to me that they had to put that item into their accounts in rendering their statements. I think you will find it so in the statement itself.

Professor BEMIS—The commission may insist upon some provision for depreciation before allowing a new bond issue, but there is no such provision in the law itself with reference to private electric plants.

Lieutenant CAHOON—In regard to that statement, I would like to call attention to this week's issue of the *Electrical World and Engineer*, where there is a careful analysis of all plants, and I would recommend any of you who are interested in that subject to take it and read it.

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THURSDAY AFTERNOON SESSION.

Mr. Wallace Macfarlane, Chairman; Mr. John Martin, Secretary.

The session was opened by Mr. U. N. Bethell, General Superintendent of the New York Telephone Company, who spoke upon "The Superiority of Corporation Ownership of Telephones." Professor Frank Parsons, of the Boston Law School, replied, advocating the "Public and Co-operative Ownership of Telephones." A paper by Mr. A. R. Bennett, engineer of the Glasgow municipal telephone system, was read upon "Municipal Telephony in Great Britain." All of these addresses appear elsewhere in this issue.

"The City Ownership of Water Supply" was then discussed by William R. Hill, Chief Engineer of the Aqueduct Commission, New York City. The discussion was opened by Colonel Robert Grier Monroe, Commissioner of Water Supply, Gas and Electricity of New York City.

Commissioner MONROE—It strikes me that the question of municipal ownership of the water supply is purely academic in this locality. I do not suppose the citizens of New York have any more idea of turning their water supply over to a private company to manage than they expect to turn over their police department or fire department to a private company. But, incidentally, in the work of increasing the supply of water for New York, it may be necessary to make contracts with private water companies in restricted areas; and the city must employ private companies as contractors.

With respect to public utilities it seems to me that they should be owned and held by the city where the initial cost of the plant is heavy and the cost of maintenance comparatively light. Under these circumstances there is no question about the advisability of municipal ownership. This is the case with water supply, the operating expenses and the interest payable on the bonds which bear a low rate being comparatively slight in proportion to the revenue. In the water system of New York, there will be this year, besides interest on the bonds outstanding and maintenance and operation charges, probably four million dollars. The operation of the water department is not particularly extravagant, and I don't think it has been very extravagant in the past. But it can be tremendously improved, and eventually the price of water may be brought down.

Mr. Hill has spoken very fully about metering. Of course, the universal acceptance of meters in the city of New York would immediately solve most of the difficulties that confront the department. As a matter of fact, the public at large is not willing to accept meters. It would be impossible to meter all of New York at the present time. My own theory is that we should take advantage of the meters set and gradually extend them. This could be done by following the line of least resistance. There may come a time when we shall be able to make a man pay for exactly what he receives, but it cannot be done instantly.

On the question of waste, we are making a very careful survey of the city, particularly Manhattan borough, measuring the water that goes into those districts, looking after the plumbing in the houses, comparing the amount of flow with the number of people, and getting the per capita consumption. Within a few weeks we will be able to make a report that will show more clearly than has heretofore been shown just where the water goes and just what becomes of it after it gets into the pipes.

Mr. THOMAS A. FULTON, Secretary of the Citizens' Union—In the course of an investigation of the waste of water, a careful review of all the authorities led to the conclusion that 50 to 66 per cent. of the total amount brought to the city limits is wasted inside the city, much of it from the main and service pipes in the street and as much or more from faulty plumbing in houses and the innocent ignorance of people who do not know what a large amount of water escapes through a small leak and that wasting water means wasting money. Instructed by the Citizens Union to get information about public comfort stations, I found incidentally that in some of them, at certain seasons of the year, some 100 gallons of water or more are used for every visitor, 95 per cent. of which is sheer waste. This led to further research, brief but convincing, as to the waste of water in and by other city departments, schools, street cleaning, parks, charities, corrections, fire department, police, etc. About one-third of all the buildings other than public buildings in Manhattan have water meters in them and the city authorities are trying to secure the gradual introduction of meters all over the city. Meantime the government stands convicted of the inexcusable negligence of having no meters whatever upon the water mains with which to detect the underground and house waste and few or no meters in any of the public schools which provide accommodation for half a million pupils or in any other public building, where I know from observation that water is profligately wasted. The only schools which have meters are those in the outskirts which are supplied by private companies. The city authorities say to the people "You must be economical, but we will not be."

I am pleased to say that the present commissioner of water supply is taking active steps to localize and prevent this waste and that meters will soon be placed upon all the street mains and also in all public buildings, I have no doubt the result will be astounding. In 1835 the people voted by three to one that the city should own its own water supply, and the first Croton Aqueduct was at once commenced. Through all the sixty-five or more years we have had full municipal operation of this greatest and chief of all public utilities and always with lax management and profligate wastefulness. Is there here any encouragement for municipal operation of all public utilities?

Water is a government monopoly in the interest of the public health and operation necessarily goes with it. It is certain that had the ownership of the Croton water supply, which has cost the city about \$100,000,000, been in private hands, the

flagrant and demoralizing wastefulness which has prevailed for many years would not have happened. No private company would have allowed more than half of the water brought to the city to be stupidly, carelessly and criminally wasted. These are strong words, but I am driven to use them by the actual facts. The so-called use of water in our public departments is far more wasteful than that of any private use citizens whether domestic or manufacturing. Such profligate waste in private use would be considered criminal; it is none the less so being public waste. The water department should and could control this waste, but it has not, until very recently, even attempted to do it.

I was thus led to further inquiry about municipal operation, and I find that a very large proportion of the employees of the city work from thirty-three to forty hours per week, not deducting holidays and summer vacation. Thousands of our employees actually average about twenty-five hours a week the year round, deducting holidays and vacations, and give very inferior service at that. They justify Mr. Gruber's witticism that they go to work at twelve, take an hour for lunch and quit at one o'clock. The present government very rightly stands for the eight hour day? The Trades Unions are responsible for it, but it means eight hours of actual labor. The carpenter or bricklayer goes to work at 8 A. M. sharp, quits at 5 P. M. Deduct an hour for dinner and you have eight hours of actual labor, and any man worth his salt is willing to work that. Thousands of workmen work nine and ten hours—more in number than those that work eight hours.

We are spending more money than ever, and with proper supervision the government ought to be run at 75 per cent. of the present outlay. I of course except the three large departments: schools, police and street cleaning. The teachers have a short day nominally. Deducting Sundays, they average but four hours for the three hundred working days of the year or six hours for the two hundred actual school days, but conscientious teachers, and they are in the great majority, have other hours of work and study and the work is very exhausting. The police and street cleaners put in eight or more hours, but the work of the former does not seem to drain either head or body. The street sweepers certainly earn their money.

Some will urge that the department clerks do not fairly represent municipal operations. I insist that they do absolutely represent that very thing. They are parts of the necessary working force, and I will further add that if any mercantile establishment in this city were run in the same measure as most of our city departments, it would be bankrupt in a twelvemonth.

It is with extreme regret that I am forced to state these conclusions, but the advocates of municipal operation must take things as they are and not as they want them to be. I shall advocate municipal operation the moment the conduct of our city departments justifies it.

\* The session closed with an address by Hon. John De Witt Warner, President of the Art Commission of New York, upon "Municipal Operation Necessary to Co-ordination Public Services," which is published in this issue.

#### FRIDAY MORNING SESSION.

Mr. John G. Agar, chairman; Mr. John Martin, secretary.

Dr. Charlton T. Lewis addressed the convention upon "How Should Public Service Corporations Be Controlled?" (Published in this issue.) Mr. R. R. Bowker,

formerly First Vice-President of the Edison Electric Illuminating Co., New York, opened the discussion.

### PUBLIC CONTROL OF CORPORATIONS.

By R. R. BOWKER.

Mr. Chairman and gentlemen, I hope to contribute to the practical side of this discussion from an experience of ten years some time ago as the executive of the company mentioned above (Edison Electric Illuminating Co.), which has been, I think, throughout its history the largest enterprise in that field in the world. But first I will take the liberty of stating both the general and specific points of view from which I shall say a word or two in linking this discussion with the principles and discussions of the preceding days and with one thing which Dr. Lewis has so ably set forth.

I speak as one who believes thoroughly in democracy and in universal suffrage, who is a democrat with a small "d" through and through. For that reason as well as from experience I feel as strongly as Dr. Lewis has put the case, that commercialism or business should be separated from government as absolutely as is possible. Democracy is intended to give every man a free field for himself, both in personal life and in business. It is the old kind of organization, which we have known in European governments, the centralized kind of organization, which necessarily presents parallels with the current industrial organization. As a matter of fact, everybody who has had to do with industrial enterprises and corporations of various sorts knows that for practical success, such corporations must be in the control of a small body of men, usually a board of directors, who in turn rely upon a very few of their number, and upon the professional experts whom they employ for the basis of their decisions. Ultimately there is within such an organization one directing spirit, in these modern times a man of great executive ability, who is often in charge of a great many enterprises more or less linked together.

Now the first practical result, it seems to me, of what in the broad meaning is socialism, what we are endeavoring to reach when we engage municipal governments in these various enterprises, will be to put the posts of honor in government into the hands of trained business executives of large ability who are capable of handling large business interests, and I do not think that experience has shown that these men should also have given to them the trust of government.

In the position which I held I made it my business to go all over Europe to find out what was going on in the electrical field, and I grew naturally in very close touch with that country which has a common language with ours. In order to get to the bottom of things, I went to the leading English cities, those which have been almost the leaders in what is known as municipal development; and I found that the practical, working executives admitted at once that they could not handle the labor in their works effectively, because they could not discharge the inefficient workmen without bringing down upon themselves the influence of so many people that it took almost all their time to see the people instead of managing the works. That does not occur in a private enterprise, because the executive does not feel bound to listen to people who come for that purpose. To my mind that was one of the most striking defects of handling business enterprises in connection with government.

I hold as firmly as ever to the belief that industrial enterprise should be on one

side of the line and government on the other side of the line; that when we cross that dividing line and mix politics with business and business with politics, we are introducing the worst political poison into the community.

Mr. Chairman, the octopus in natural history is a creature which reaches out with many arms, and which diffuses an inky darkness about it to elude its pursuers. Usually in most cities there is some commercial organization known as the octopus. That was the name for many years of the Consolidated Gas Company. It was not long since that this particular octopus absorbed all the other lighting industries in this city, and the transportation facilities—most of them—were under the directing influence which became practically associated with the directing influence of the Consolidated Gas Company, so that it is notorious to-day that the transportation facilities of New York, with the exception of the subway rival interests, and the lighting of New York are under the same control.

Now I want specifically to agree with Mr. Warner in his address of yesterday, that we must face this fact. From the industrial point of view it seems desirable that you should have a unified industry to carry on public enterprises in a given territory. I do not mean that the gas interests and the transportation interests should be in the same hands, but that it is not worth while to have the waste of several lighting companies and several transportation companies working in a field where a united and vital organization would be more effective for the convenience of the public. I used to believe that there ought to be, for instance, two rival lighting companies in New York; I have given up that belief. We are facing in New York the situation of having a monopoly of two interests in the same hands. I mean to discuss only the monopoly of one of these interests, and to suggest the lines of possible public control. Do not let us go back to the system in which we had half a dozen gas companies laying mains in the same streets, or several transportation systems and the streets crowded with parallel lines of cars, each independent of the other, and each an added expense if you wanted to cross from one part of the city to another. Let us recognize that we need a unified system, which is another word for a monopoly.

But the protection of the public interests seems to have been left in that inky darkness with which the octopus surrounds itself. The first remedy is publicity. In my judgment most if not all corporations which get their corporate powers from the state should be at the disadvantage, if you please—I do not think it is a disadvantage—of showing their hand; that is a thing which the state and its people have a right to demand for the privilege of using powers given by the state. But whether that be true or not, the corporation which uses public franchises certainly ought to account to the public, and we ought to require as the first step that all the accounts from one end to the other of public franchise corporations should be open to a competent public officer, who should in turn report to the state government and to the people. Great credit ought to be given to that much-abused man, Mr. Vreeland, for the way in which he has disclosed both to the engineering profession and to the public facts connected with the Metropolitan Street Railway Company, as well as for the wonderful engineering work which has been done in carrying passengers during the recent transformations. It calls to mind the old Scotch story of building a new church out of the material of the old and keeping the old church to worship in meantime; this is the problem which has been solved by Mr. Vreeland in his able management of the Metropolitan Street Railway. I do not think the stock end of that corporation has been given the same publicity; and I believe there ought to



be the public power to go into the corporation's office and books and get everything there is in the books, and bring all of it to the daylight and to public knowledge.

Secondly, there ought to be every possible precaution against over-capitalization. That is a very difficult thing to reach. It is reached measurably through this remedy of publicity. How to reach it directly I cannot profess to tell you, but it can be reached indirectly; it can be reached through the powers of taxation; it can be reached when we study the question probably in more than one way; but which way is the best I cannot attempt to advise.

Thirdly, there ought to be a limit to the earnings of a public franchise company; after a public franchise company has fairly paid its stockholders, it ought to give to the public the advantage of the economies which its privileges enable it to accomplish, and the economies which come with the progress of the art. I am glad to say that in the old administration of the Edison Company, the principle was accepted by the board of directors that when the company could declare a 10 per cent. dividend, which compensated the stockholders not only for the investment of capital, but for the considerable risk which they took at the beginning, it should reduce the price of electric light to the public from time to time, so that the dividends should not exceed that limit. That course was justified by the parallel business consideration that, after all, the way to get business was to make electric light, as any other commodity, cheap. At the time of the change it was announced that the cost of lighting in this city should be reduced a third. The old administration had previously made several reductions and had arranged to make additional reductions, but I think no substantial reduction has ever been made since the change of administration. Of course that proposition can be made practical only through thorough publicity, giving to some city official full power to look into the entire corporation accounts. The 10 per cent. should of course be based upon actual investment, not upon capitalization. The subways in New York were controlled by the city under a very curious provision which created a constructing and operating company, and the city was entitled to reclaim possession of the subways after a certain date, and when the dividends or the earnings had reached 10 per cent., rents of ducts were to be reduced. The earnings always stopped short of 10 per cent., and without full publicity and examination it is easily possible that earnings never will reach 10 per cent. So you have to know your facts as the basis of any kind of regulation or control.

Fourthly, I should say that the municipality, not an operating concern, should, however, own definitely everything connected with its streets; not only that the transportation rails, etc., should be owned, but that the gas mains and other lighting subways, the telegraph and telephone subways, as well as the pipes of the water system, should be owned by the municipality. I am making the distinction here between a plant and the operation of the plant; or you may say between the passive plant and the active plant. If the city actually owns the plant in its streets, then it is in a position to make terms with operating companies under leases sufficiently long to give the operating companies a chance to make fair return, with provision for equitably transferring property rights in case of any change in lessee.

Finally, there ought to be a competent system of inspection of the operating companies from one end to the other, in the interest, as Dr. Lewis has pointed out, of the public. It is a great deal better to make that inspection automatic so far as possible, and it seems to me that a very happy suggestion has been made as to recent transportation difficulties in the rather new thought that the transportation company should be obliged to give a half fare rebate to those who have not a seat. It seems

quite ridiculous from a practical point of view, to talk in this country about keeping people out of the cars when there are no seats for them. In Paris the omnibuses have a beautiful system of putting up the word *complet* when all seats are filled, but if those omnibuses were run here the American people would rush into them, and there would be more trouble if the conductor should attempt to put them off than all the trouble we have to-day. So I say that the control ought to be automatic, in terms of money loss to the company. But we must go further than that; we must have competent, clean and sufficiently able public officials to inspect the companies and their operations, and these men would have to know as much as the men who are doing the operating. The operating company must have the best ability it can get to make a success, particularly in a complicated industry, and the city must have men who can cope with directors of that ability.

A DELEGATE—Where will you get them?

Mr. BOWKER—By paying for them, and paying adequate salaries.

A DELEGATE—You can't get them then.

Mr. BOWKER—You can if you will pay as much as the companies do.

Mr. FILENE—The civil service law will do it.

Mr. BOWKER—We need, as the inspecting officer in transportation matters, an engineer of the first rank who has had transportation experience, who would be only less familiar with the facts and figures of operating the plant than the transportation companies. Until we recognize that fact we can not get the inspection and control that we should have from the point of view of the municipality and the people. The municipality must be prepared to pay honestly and fully for the services of sufficiently able men. There is an additional motive to such men: A public-spirited man is not only earning his salary, but he has the added sense of doing service to the public, and if you pay the man fairly in the service of the municipality, you are giving him an added motive which should, and I believe will, make him more alert for the interests of this city than even the executive or inspector for a private corporation. The one man is working for the people; the other man is working simply as an employee. If both are on an equal or nearly equal basis as to pay, you have in one case a motive which is not to be found in the other case.

Mr. HEINEMAN (of Detroit)—Until a moment ago I had no notice that I would be invited to contribute to this discussion. All of you know that what Detroit presented yesterday was substantial fact, and I am probably called upon now because you feel there may be a disposition on the part of her delegation to disagree with much of what has just been said by Mr. Lewis in the opening part of his speech. We do disagree; not so much in details as in regard to certain fundamental concepts of human nature, according to which these questions must be successfully or unsuccessfully solved.

If there be doubt as to successful municipal control of public utilities, we meet that doubt, not with theory but with fact. Those who were present yesterday must have been assured that in the public administration of lighting and of water we need not compromise in any detail, that the question has been successfully met and solved in Detroit. Mr. Lewis says the public cannot manage it. Detroit says in reply that it has managed it. When it is said cities cannot successfully control public utilities, we say in reply that we do control them. This controversy is very much like the dispute that occurred many years ago between the present vice-president, Mr. Fry, and Professor Agassiz. Mr. Fry said that he had caught a five-pound speckled trout in a certain lake in Maine. Professor Agassiz said it was impossible, the species

never got that big. The next summer Mr. Fry sent the Professor a six-pound speckled trout and soon after received a reply saying, "A lifetime of theory knocked out by a single fact." And so our Detroit delegation is not inclined to take up the time of this convention in theorizing. We yesterday presented facts.

Now where is our main point of difference, wherein do we disagree with the learned gentleman who presented this question? We differ with him simply in our views of human nature. He says he is afraid of nineteen out of twenty people who go to the polls. We are not afraid of anybody who goes to the polls in the city of Detroit.

Does this convention assume that the question, say of public lighting, was solved in Detroit in about the same manner in which a meteorite is discharged from heaven to earth? Not at all. We had to educate the people. It came up in the legislature and was defeated, and why? Because nineteen-twentieths of the voters were unsound? No, but because the one man out of twenty was a source of corruption in the city of Detroit and the state of Michigan. It was the man who controlled legislation, who tied a string around the upper house of the legislature. The law providing for public lighting in Detroit was passed after several attempts and then only with one vote to spare. Money was freely offered back and forth to control that vote as well as to control many other votes. But the law was passed.

We now have the question of a primary election law. During the legislature of 1899 such a law was brought forward and passed in the house, but because the senate was under certain questionable political influences it was defeated in that body. Did the people of Michigan stop at that? By no means. It was brought up in a subsequent legislature and again it was defeated. That did not stop public education on the question, and finally by the force of this continued public education the law has just been passed, and I believe the ink is to-day drying upon the signature of the governor of the State to that law. What we have done I believe every city represented in this convention will have to do. You will have to educate the people. In every department of public utilities where the city has taken control, popular education on the subject matter has been necessary.

Another example: The franchise of one of the street car lines of the city of Detroit expires in about seven years, and last Tuesday night the common council passed a memorial to the legislature, asking it to submit a constitutional amendment enabling the city of Detroit to control and operate street railways, because it was found that a certain law to that end had been declared unconstitutional by the supreme court. Did the agitation stop when the judges of the supreme court so declared? By no means. A constitutional amendment is now sought to be offered to the people. I make this prophecy here; that this present legislature will not submit that amendment, but I make the further prophecy, that on account of the continued agitation by the people, the next legislature will feel obliged to submit that amendment, and that amendment will be carried. Our people are looking forward seven years in advance of the time when this municipal situation must be met.

I come back to the main difference between ourselves and the gentleman who opened this discussion. We trust the average man. You can go down in the subway of your city to the Italian workman who is blasting rock, and if the Italian finds the pay-roll is being padded, whereby another workman is getting an advantage of ten cents by some unjust partiality, that Italian is indignant at the injustice. I don't care how low (using the word "low" in the sense of "humble") you go in the range of human circumstance, you will never get so far down but what you will

find that every man instinctively hates a boodler. I have been many times in meetings of day laborers and stove moulders in our city who were discussing these very questions, and almost any workman you meet can intelligently discuss these questions of municipal ownership of street cars or gas or electric lighting. The pulse that is moved by the heart of the average man beats true, that the average man can be depended upon for honesty. He may sometimes be deluded, his judgment may sometimes be at fault, but the germ of righteous indignation springs up in his conscience whenever that conscience is touched by public wrong.

You recall what we presented yesterday. We have run our water works for fifty years, we have run our lighting plant for seven years. At the end of three years more we are going to have our lighting plant all paid for out of our saving over private contract. We have other boards, and have never had a scandal to amount to anything. Sometimes a petty clerk absconds, but I think the loss is less than would be the record in cases of private companies. We point to a successful record; and I think the real cause of it is to be found in the fact that we believe in educating the people.

In illustration of these things, let me say a word in relation to the late Governor Pingree, a man much misrated and generally misunderstood. Whatever may be said in detraction of him, that detraction is fast dying out. Within a few months its last words will be hushed as the flags fall from about the statue erected to him by a grateful people. Whatever else may be said about him he at least was a great educator of the people in the great questions of taxation, of franchises, of reform. It was by popular education that he brought these questions close to the common conscience.

Perhaps we are more optimistic, and cannot therefore agree with the distinguished gentleman who has addressed us. We do not think he is correct. If we looked on life as he does we might as well haul down the shutters and close up the shop. He said he might talk till doomsday in advocacy of his views. I say that doomsday has already arrived if his views are correct. When Detroit was almost entirely destroyed by fire it adopted for the city seal an old time legend: "She will rise from her ashes. We hope for better things." It is in this spirit that we look upon these great questions of municipal control. We believe the successful solution of these things will continue, in our case at least, in the future as in the past. We are not pessimistic; we look toward the light. "The sun was risen upon the land when Lot entered into Zoar." Let us believe as we move into the land of a higher civic life, that the light we see upon the horizon is indeed the light of the risen sun.

Professor DYER (Nashville, Tenn.): I want to ask Dr. Lewis a question, but before doing so I wish to say that I do not believe that New York, Philadelphia and Chicago represent the municipal life of this country. I have lived in several small cities, most of them in the South, and I really believe that as a rule we have a purer municipal life, and if these gentlemen could go to the smaller cities, in the South at least, they would have a much higher opinion of the citizenship than some of them have. It is very rare in the South that we hear dishonesty charged against our city council.

As I understand Dr. Lewis, he advocates that the discussion of difficult questions be taken away from the people, that they should vote for good men, and that these men should determine how these questions should be settled. I want to ask him if he thinks that suggestion at all possible or feasible of realization in this country. On the other hand, is not the whole tendency in the other direction, to bring

all of these questions before the people? At the present time it seems to me that the tendency is decidedly in this direction.

Dr. LEWIS—I do not quite catch your meaning.

Professor DYER—As I understand, you advocate that in the election of the city council for instance discussion of the difficult questions of civic government should be taken away from the people, and that they should vote for men simply on the ground that these men should determine those questions.

Dr. LEWIS—The answer to that question, if it were given in full, would take too much time. It suggests a discussion of considerable length. I must content myself by saying simply this: There is no doubt whatever that the present tendency is to demand the submission of such questions to the voting constituency, and it is this pernicious tendency, growing out of the confusion of the functions of government with those of business administration, with which it ought to have nothing whatever to do, that confuses the voter at the polls and destroys the value of the electoral franchise. So long as demagogues can go up and down the country preaching and talking on any question in regard to religion, morals, economics or science, and calling for the public opinion on abstruse and mathematical questions as to which economists, mathematicians and scientists differ, so long shall we have these crazy and cranky ideas before the people, and have them promulgated by crazy economists. So long as these conditions continue I do not see any remedy for it.

Professor DYER—Don't you think the educational effects of the discussion of these questions on the part of the people should be taken into consideration?

Dr. LEWIS—That depends on what the questions are. The educational effect of discussing before the people questions of government is of supreme value. The political education of the people should not be given up but continued. Questions concerning the franchise are admissible, but questions of business policy, of scientific import and abstruse questions are confusing, and in the long run essentially degrading to the voting people.

The condition of the public mind is one which you gentlemen do not in the least imagine. A friend of mine went the other day to try a case in Missouri; it was a suit on a life insurance policy; there was not a vestige of merit in the claim. He argued the case and took the ground that it was not to be considered for a moment. He really did not believe the court would send it to the jury, but the court thought there was some vestige of merit in the case and sent it to the jury, and the jury quickly brought in a verdict against the company. The next day my friend, the lawyer, met one of the jurymen on the train. The jurymen said: "That was pretty hard lines on you yesterday. In that case we tried there wasn't any show, was there, for the plaintiff?" My friend replied: "Well, how did you gentlemen agree on a verdict for the plaintiff, why didn't you find a verdict for us?" "Me give a verdict agin' a widder, and in favor of a company; not much; I never could go back home if I did." Now that is the state of mind of nine-tenths of the voters of the United States to-day.

(Voices) No, no, no.

Dr. LEWIS—Nine-tenths of the workmen in this country are dominated by that feeling. Until we can get government confined to the administration of law and justice, and divorce it from matters of business, we shall have this debauching of the franchise.

Mayor URQUHART (Toronto)—Assume that in the United States you have a fair franchise with a corporation, which provides that the city administration, or an



officer thereof, shall have power over construction, as we have, how will you enforce that agreement, will you enforce it by way of the courts and have to await the delays of the law, or would you have some special tribunal?

Dr. LEWIS—Can't you make your question more specific?

Mayor URQUHART—Suppose a city has an agreement with a company, say a transportation company, and under that agreement the officer of the city has the right to say the number of cars which shall be in service, the speed and everything to control it absolutely, practically.

The CHAIR—In other words has the right to direct the administration of the corporation.

Mayor URQUHART—Yes. He gives his orders that it shall be administered in a certain way, that so many cars shall be run, a certain time table maintained, certain accounts kept, etc. How will you enforce that agreement? Have you to do it through the courts, or have you some special tribunal for that purpose?

Dr. LEWIS—That is entirely out of the line of my remarks. I do not think that in the time which is given me I can go into detail. The power of control is in the superintendent of that particular department, but there will be no use of going into it, unless I can go into it in detail.

The CHAIR—I will ask Mr. Lawson Purdy, secretary of the Tax Reform Association, to read "Regulation and Taxation of Public Service Corporations," by Allen Ripley Foote, Editor of *Public Policy*, in Mr. Foote's absence. (Published in this issue.)

Professor COMMONS (New York City)—In discussing this paper I shall occupy but a very few minutes. There can scarcely be any doubt that the general practice in the taxation of franchise corporations is not in harmony either with the principles of equality or of industrial efficiency of those corporations. It is quite common to place a license tax on streets cars of fifty dollars a year, and yet the people complain of being compelled to stand up in the cars because there are not sufficient cars. If we want cars for people to ride in, we should not tax directly the agencies by which they ride, we should not tax the cars and thus offer an excuse to reduce the number of cars. We should take off the tax on the cars, and if the companies are to be taxed at all, they should be taxed in some other way.

I should agree with Mr. Foote's principles to this extent: The tangible property, the improvements, the mechanical and technical equipment of these companies should be exempt from taxation. The companies should be encouraged to develop facilities by the addition of physical equipment. But on the other hand, under our so-called democratic institutions, we must meet the popular feeling, the public sentiment, and there is no sentiment stronger or more fundamental than that of equal treatment. That sentiment must be complied with. If any contrivance runs counter to the popular ideas of equal treatment, it is sure to arouse class feeling and jealousies, and even though the people may be wrong, that question of equality and equal treatment must be met.

Now I think that is the basis of this widespread demand for franchise taxation, which has begun in the last few years and is taking hold of many states. General gross receipts taxes are not in favor because it is recognized that this is a very unequal form of taxation, that it taxes the corporations which have large receipts but may have also large operating expenses, the same as another corporation with the same receipts, but with very low operating expenses.

The franchise tax is a tax on the capitalization and the net earnings, and net



earnings is the basis of the value of the privilege, the value of the opportunity. The so-called stock and bond method of simply adding together the stocks and bonds at the market value and taxing the corporation at the general property tax rate is something that is opposed to the idea of equality. It is something that is generally simple in operation, which does not require a system of public accounting, which simply requires a clerical operation, an acquaintance with the quotations on the market, and ordinary common sense, which can be found very readily. So we have that system being put into practice in our several states regarding railroad and regarding local corporations, and it certainly appeals to the public.

Now the difficulty, the real difficulty in this proposal of Mr. Foote, lies in that question of equal treatment. I do not think it would be possible with our American democracy to successfully carry through a scheme of turning over to a private corporation the ownership of a plant which has been paid for out of public taxation. But that does not militate against a plan like that of the Rapid Transit Subway in this city, where the plant itself is being built out of the taxes, and is to be owned by the people. If we can make a distinction between the ownership and the operation we can get all of the advantages which Mr. Foote proposes by providing that we should have municipal ownership; the city securing the advantages of its low rate of interest, the advantages of unified, monopolized control. We can secure all those advantages, and we can only secure them by municipal ownership, and that is the only reason why in this city in the case of this subway, it has been possible to provide for non-taxation of that interest. It has seemed that if it is public property, owned by the public, then to tax it would be simply to take from one pocket and put into the other pocket; but if a private company had to build that improvement out of its own funds, it would not be possible under our ideas of equal treatment to exempt from taxation.

The Chair then introduced Judge Raymond V. Ingersoll, who spoke upon "Labor Clauses in Franchise Grants." His address is printed in this issue.

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#### FRIDAY AFTERNOON SESSION.

The first address was given by Mr. George H. Shibley, Chairman of the National Federation for Majority Rule, upon "The Referendum and the Initiative in relation to Municipal Ownership." (Printed elsewhere.)

The CHAIR—I take pleasure in introducing to you Mr. Eltweed Pomeroy, president of the National Direct Legislation League, and editor of the *Direct Legislation Record*.

Mr. POMEROY—Whether we approve of direct legislation, the initiative and referendum, or not, one thing is certain, it is rapidly coming at least in municipal affairs. The last ten years have seen a growth in national affairs and in state affairs; but the greatest growth has been in municipal affairs. This growth has been largely unnoticed and even unknown. For instance, every year every city in Massachusetts votes on the question of whether they will have license or no license, and by the adoption of a law only this winter Vermont decided to apply the same method to the decision of her liquor question and New Hampshire has just done likewise. The lower house of California has just passed a similar law. They do not, however, call this initiative and referendum; they call it "local option." For six years in Massachusetts, two, three or four questions have been voted on in every city—ques-

tions relating to all sorts of matters, the formation of corporations, the opening of streets, of water works, etc. All cities of any size in Colorado will have direct legislation by constitutional enactment. In Minneapolis, Detroit, Nashville and some other large cities, all municipal franchises have to be submitted to the vote of the people whether the council wish it or not.

The most important growth has been in the cities on the Pacific coast. Los Angeles, Sacramento, San Francisco, Portland, Seattle and Victoria are now under more or less complete forms of direct legislation—in fact all of the larger cities of the Pacific coast, excepting Tacoma, and also a number of smaller cities. There are five constitutional amendments on this subject now before the Massachusetts legislature; one gives direct legislation in state affairs, another in municipal affairs, and the probabilities are at least three out of five that they will be passed at this session of the legislature. Oregon has just passed a good law to carry into effect its new constitutional amendment for direct legislation. In California a strong amendment passed the lower house and was defeated by a vote of 14 to 13 in the senate. The Missouri legislature has passed an amendment for direct legislation which the people will vote on at their next election. Probably Illinois will pass such an amendment.

What are its effects? One of the supervisors of San Francisco told me a year ago when I was out there, that it had worked a complete change in the municipal government of San Francisco, that they used to have one of the worst municipal governments in the country, and to-day it is one of the best; that there is no opportunity for jobs, no opportunity for giving away franchises, because they know any franchise they may attempt to give away will be called up by referendum, and the people will vote on it, so there is no inducement for rascals to go into the city government, or for rascals who are in the city government to sell out. Up to last Fall it had only been used once there. What do you suppose it was used for? The gamblers of San Francisco wanted to have open gambling, so they drew up an ordinance which would permit open gambling, and they secured enough signatures to their petition. It was thoroughly discussed and then submitted to the vote of the people and it was so overwhelmingly voted down that it has not been heard from since. Last fall there were nine questions submitted to vote in San Francisco, one was the municipal operation of the Geary street railway. It obtained a majority of about three-fifths, and I think a majority of two-thirds was required, so it was not carried. There were eight or nine other questions submitted at the same time, and carried by a variety of votes. I have the testimony of a great number of intelligent people that there was great discrimination shown in the voting. Two were voted down and the other six carried.

One of the most interesting developments to-day, without any law at all, is the postal card referendum, taken at Logansport, Indiana, last year regarding the ownership of the telephone system. The citizens committee got together. They wanted the city to operate the telephone system, and there was a law under which they could erect their own plant, so they instituted a postal card referendum, sending a postal card to every one interested, and then publishing the results of that vote. Of course it was entirely unofficial, but the sentiment was so overwhelming that the authorities later on adopted a municipal telephone system.

Some people say you cannot get the majority of people to vote on questions submitted to them. In Galveston last summer, at a referendum they had, over 99 per cent. of the voters voted. You do get a large number of the people to vote on the questions which interest the people; if they do not interest them, they do not vote.

What do you have, therefore? You have an automatic, self-disenfranchisement of the uninterested and ignorant. Only the man who owns no property and is unintelligent does not vote. It would be a great deal better if everyone was interested and voted, but as long as this self-disenfranchisement applies to only those who disenfranchise themselves, nobody else has to suffer.

The towns of Massachusetts have a yearly referendum on the liquor question, and almost always there are more votes polled than are cast for the governor of the state. In the cities, where the votes are less, it is due to the fact that the majority one way is so large that everybody knows it is either going "license" or "no license." In Boston, everybody knows it is going for license. So a great many people think it is not worth voting one way or the other.

Another case was in Terra Haute last fall where a Democratic mayor had given the city printing to a newspaper which was not a Union Labor paper. On behalf of the paper, it is asserted that it was conducted on the co-operative plan; and the question was submitted to popular vote at the city election, and was condemned by a big majority, yet the mayor whose course was disapproved was elected by an increased plurality. This brings us to another point. Under the present system, if we want to reverse the course of legislation, we often must vote against good men who would make admirable administrators but whose opinions we do not agree with. Under direct legislation the policy can be reversed, and the official re-elected, as was done in this instance. Often the people do not want to continue some policy, but do not know how without putting good men out of office. They cannot say to a candidate: "You are a good servant, and we will elect you, and vote against the policy." Direct legislation would mean that we could keep in office upright and efficient public servants, and yet oppose a policy if we wish to do so.

Lastly, there is another manner in which direct legislation works. It means a decentralization of power. The centralization of power in our political bodies is a great evil, we are giving more power to congress and more to state legislatures and taking more from local legislatures, but direct legislation will counterbalance this evil. It will mean more decentralization. For instance when I was speaking in Fargo, North Dakota, the mayor of the city asked me shortly after hearing my address: "How would it work here in North Dakota. The citizens of Fargo want to own their own electric lighting system, and if they had authority the city would have owned it. If we applied to the people of the state, they would vote it down because the farmers do not like the cities." I said: "you entirely misapprehend the purpose and method of the referendum. If you ask for any special privilege for yourself you will be beaten, and ought to be beaten, but if you propose a law that any municipality in the state may operate its own plant, then everybody in the state will vote for it. In other words, by asking for the same privilege, for every other municipality in North Dakota that you are asking for for Fargo, everybody will be willing to grant it. You will be decentralizing power and each locality will distribute its own money in the locality instead of centralizing it in the hands of some great corporation."

How will it work in local government? It will mean a great growth of civic conscience. Direct legislation is simply a means by which the civic organism can speak its will, say what it wants to do. Every time you have a vote on any question you have a growth of this civic consciousness. The feeling of civic life has got to be at the bottom of every municipal movement, or else that movement, while it may have a temporary success, in the long run, is doomed to failure. Direct legislation

fosters the civic conscience, adapting it more and more to become the mouthpiece of the people, becoming the instrument by which our need may be expressed, and by which we will say we will do so and so, or we will not do so and so.

Until you get direct legislation government work which is placed in the hands of a small group of men may prove a great failure, because it has not got the mass of the people behind it. But whenever the mass of the people vote for the municipal operation of any monopoly, and vote for it by a good large vote, then you have the civic conscience so stirred up that it is behind that law and the law will be enforced, and the people will see that it is enforced, and you have the most important element of success in municipal operation of all municipal monopolies.

Lastly, in the wonderful way in which direct legislation has come up within the last few years we see the presage of its future success. It has not come up through the efforts of any one man or any crowd of men. It has come up voluntarily and spontaneously here, there and all over the country. There are no leaders in the direct legislation movement. There are no bosses in direct legislation to-day. There are no jobs in it, no contracts, no money in it for anyone. It simply means enlarged privilege for the mass of the people. It has the enlightened advocacy of a number of self-devoted men and women; and because we are working not for ourselves, but for the benefit of all, we are banded together as a group of workers.

Professor PARSONS—I tried yesterday to emphasize the fact that municipal ownership of public utilities required as its basis public ownership of the governed, and I believe that the greatest essential is direct legislation. We must have also, so that the people may control the election of their candidates, non-partisan ballots as they have in Australia, civil service rules, perhaps proportional representation, and so on. Private monopoly in the municipality, the state and the national government is the disease, and direct legislation is the remedy, and the direct means of changing that private monopoly of government into the public ownership of government, by and for the people.

Mr. KELSEY—There is one question which has come to me, and that is whether, under our conflicting system of legislation and the very great need of legislation in a growing country, it will not become so burdensome, as the principle is applied to all this legislation, as to destroy its usefulness? For instance, in our municipal affairs, we would vote on an almost endless variety of propositions, all important in themselves or important to the community. If the electorate undertook to deal with all of these questions, what opportunity would they have to attend to their own business. We hear the complaint, and no doubt justly, that the pressure upon business matters is so great that very few, comparatively few, perform their public duties, the duties devolving upon them as citizens. Our secret ballot has become so long that it is a problem and study for one to know all the names on the ballot, and the importance and the relations of the candidates, so that he may vote intelligently.

Now, the point I would like to raise, Mr. Chairman, is whether, if the principle were applied to our national, state, county and municipal affairs, it would not become so burdensome as entirely or practically to destroy its usefulness.

Mr. SHIBLEY—I am glad that Mr. Kelsey has mentioned that point, because it is an essential point. Only questions of the utmost importance should be submitted by referendum, and the people should have the right to ask for their submission. The mere fact that this right is possessed by the people purifies our

legislative bodies, and they go on as representatives and do as they are directed, having in mind the power of the referendum.

Mr. BRANDEIS—I think it might interest this audience to hear something about the power of the referendum in Massachusetts in checking the powers of street railways, but I would like before speaking on that to make this point, which I think has not been always brought out in these discussions, and that is, that after all the referendum is nothing more nor less than the principle of town government. When towns grow beyond a certain size it is not possible to get all the citizens together, and the referendum is simply a means of getting the vote as you would in town government. But at the same time it is lacking in one of the very important points of town government, and that is that in town government the vote is based on a full, complete, thorough discussion of the questions before the people who are going to vote; while in the referendum such a discussion is not possible. Therefore, it seems to me there is a limitation, and a very large limitation in principle upon the wide extension of the referendum. Notwithstanding that fact, it has had a very beneficial effect in checking the power of corporations, and it came about in this way.

Some of you may or may not remember that there was a very determined attempt by the elevated railroad, which is a very powerful corporation in Massachusetts, and is supposed to completely dominate the legislature, to put tracks back upon Tremont street. The people protested to the railroad commission and to the city, and by the hardest kind of work a bill was submitted to the legislature. After a very earnest contest the matter was submitted to the people of Boston, and to the surprise of the elevated railroad, which expected a victory, they were so completely snowed under that it was felt that there would never be another referendum in Massachusetts on matters of that kind.

Then came the subway fight, a fight for municipal ownership of the subway. That was carried on over three years. One of the most important bills was vetoed by Governor Crane because there was no referendum clause in it. Finally, it became evident that public opinion was so strong in this matter that no bill could be passed that did not have a referendum clause. When that became known, it resulted in the compromise by which we have succeeded in getting a very good bill through, which provides for the public ownership of the subways, and this was very largely due to the effect of the referendum clause.

But there is another very interesting and important fact connected with the working of the referendum in that connection, and that is that the labor organizations were opposed, very strongly opposed, to the passage of this last bill. Notwithstanding that fact, and though it was feared the labor organizations would have very great influence, the bill was passed on the referendum by a very large majority.

These facts have shown that the referendum is a very strong factor in checking corporate influence in the legislature. The corporations may buy the municipal government, the state government, but they cannot buy the people, and so long as the referendum obtains, it is a tremendous check. Notwithstanding, it seems to me that it is not the highest form of government, it is not the best form of government, it is merely a means of checking the imperfections of our representative government, and if we had perfect representative government there would be no need for the referendum.

Mr. POMEROY—We have attacked partizanship in our municipal affairs very valiantly and rightly, but it has failed. Every one has now learned that the best attack is not necessarily a frontal attack. Let us try a flank attack, getting at the



basis of partizanship. When we have a vote on any question before the people, they do not divide on party interests; they divide on whether a law is right and good or not, and invariably thus decrease party feeling. Direct legislation disclaims any partizanship, but service to our country.

One word more about the apprehension that direct legislation will mean an increase of the burden of the people. In 1899, Senator David B. Hill compiled a record of the laws passed by the different legislatures in the United States; there were fourteen thousand acts passed. The national Congress had twenty-four thousand measures introduced in it, and between one and two thousand passed. If we turn to Switzerland, we find in the national Congress of Switzerland in one session that sixty-five measures were introduced and only twenty-four passed. The last legislature of New York passed between one and two thousand bills. The legislature in South Dakota, where they have the referendum, passed 101 laws. The governor of that state attributes the decreased number of bills to the referendum, and has said that direct legislation prevented the introduction of nine-tenths of the bad bills. When you have direct legislation you do not have the necessity for its unwise use. Direct legislation means simplification of our law making.

The chair introduced Professor E. R. A. Seligman, of Columbia University, who spoke on "The Taxation of Franchise Values." The address appears elsewhere in this issue.

The discussion of this paper was opened by Mr. Wheeler H. Peckham, President of the City Club.

#### TAXATION OF PUBLIC UTILITIES.

BY WHEELER H. PECKHAM.

Professor Seligman says that there are two different conceptions of a tax, one coming from Europe and referring to income and conceived of as a tax on income, and the other coming from this country and referring to capital and conceived of as a tax on capital. But, gentlemen, is there any difference? What difference does it make whether you consider the principal or the income that is to be taxed? Is there any question as to who or what pays the tax where it comes from, where it goes to; any question about the effect of it in either case? I apprehend not the slightest, not the remotest. I apprehend that it is true and beyond the pale of discussion that every periodic tax, no matter what its form or name is an *income tax*; that is, that every and all taxes must be paid from income. The moment that a periodically recurring tax is so large that it cannot be paid out of income, the band that holds together the political organization snaps and revolution or some equivalent force solves the problem.

Assuming then that the tax falls upon or must be paid out of income, as I submit that we not only may but must assume, what possible difference can it make whether in form and words you tax principal, *i. e.*, capital, or income? The relation between the taxpayer, his income and the tax must be such that the tax can be paid out of income and leave enough income to pay interest and the ordinary or average rate of profit to capital, or the business will be abandoned and the capital be diverted to other channels or even be abandoned as lost.

To put this idea in the concrete, let us take the case of the Metropolitan Railroad Company in New York. Professor Seligman upholds what is called the franchise tax on that and similarly situated companies and surmounts the difficulty of defining



what is the franchise so taxed by calling it the equivalent of what if it belonged to an individual or an unincorporated body would be called "good will." Well, call it "good will." Have we thereby made any advance? Is it not clear that a tax on good will is like any other tax and that it must be paid out of income and that if the income is inadequate, it will not be paid at all but that the enterprise or business (in the concrete case supposed—the running of cars) will be abandoned?

Of course I do not mean to say that in no case does it ever happen that a tax is paid out of principal or capital. Miscalculations or mis-hopes frequently lead men to pay a tax out of sources other than income. That however is but a temporary or casual substitute. Once let it be understood and realized, that the income to be obtained from a business is and must be inadequate to pay the taxes, such business is sure to be abandoned.

I think, therefore, that nothing is contributed to the solution of the problem by reference to the different conception of a tax whether on the income as in Europe or on the principal as in America. The practical result is the same. The tax in either case falls on and must be paid out of income, and if the income is inadequate it will not be paid at all.

Another question presented by Professor Seligman is what is the franchise which it is supposed has been taxed in this state by the Ford bill or law. The professor says that it is not a word known to European tax economics and I have no doubt but that he is right. Also I have no doubt but that the European conception of a tax law as based on income rather than the American conception of the same as based on principal is more correct and vastly safer. The fact, no doubt, is that European economic writers, because thereof, give us no aid in determining what is the franchise so taxed.

This question—What is the franchise taxed?—is solved by Professor Seligman by calling it "good will." I understand him to say that good will may not be included in any legal definition of a franchise. That question he leaves to the lawyers. In my judgment "good will" can be included neither in an economic nor legal definition of a franchise. A franchise, whatever else it is, must in some way be a grant from the state. "Good will" is not granted by the state; it comes from the past acts of the possessor thereof in doing its business. It means the favorable opinion or feeling of the patrons or customers towards the persons or corporations with whom the patrons or customers have done business.

But if "good will" could be included in either a legal or economic definition of a franchise, there would be great difficulty in assessing its value. Can it be supposed that any transportation company in the city of New York has the good will of any one? If any others could compete, would not the old companies instantly go to the wall so far as good will is concerned? And that brings us instantly to a realization of the fact that it is not good will on which the companies rely or which they possess, but on the *monopoly* which is unquestionably theirs as matter of fact, whether or not, theirs by law.

All railroads have more or less a monopoly of the business they transact. In some cases (such as trans-continental business) their business may be affected by the principles of competition, the tendency of which is to reduce prices to the lowest profitable point. In most cases they are free from competition and their prices can be controlled and kept within reasonable limits only by legislation or the fear of legislation. Such is the condition of our city railroads. They have no competition and consequently can have no good will. They have a monopoly of the urban trans-

portation business and to keep their business they rely not on good will but on their monopoly.

This monopoly is not a franchise. It comes from the nature of the business. In railroads with rare possible exceptions, competition cannot exist on a sufficiently general scale to produce competitive results. The alternative then must be to make government assume the role and effect the results, which in other cases are effected by the law of competition.

Now to apply these principles to the case of our city railroads. There exists in the public mind a conviction that the railroad companies have in recent years enormously prospered and that such prosperity is owing to the possession of some franchise obtained from the public. Their prosperity we all concede. That it is owing to any franchise I deny. Their prosperity is owing to the enormous increase of their business. That again is owing to the enormous increase of the population, permanent and temporary, of the city of New York and to their increased proportional riding on the cars; and to nothing else.

The companies possess no franchise whatever other than the franchise to be a corporation and the franchise to exercise the right of eminent domain. What the companies do possess is a right-of-way through the streets. That right-of-way may have been given to them or sold to them or partly given and partly sold. So far as the city is concerned, it has been generally given, but abutting owners, it is held, had certain rights and to acquire them the elevated roads at least have paid and are paying many millions of dollars. No matter how they get it, what the railroads have is this right-of-way; nothing else; no franchise. It is precisely the same interest and estate held by any railroad company outside of cities on which it runs its cars; nothing more or less;

But can it not be assessed for taxation? Surely yes! assessed like any other property, assessed according to its value at the time it is assessed for taxation, assessed according to the price which it would bring if sold to other persons to render the same service to-day. But there is no franchise about it. It is simply a right-of-way. It has become enormously valuable in precisely the same way that a lot of land may have become enormously valuable because of situation and scarcity of other available sites. The lot is assessed for taxation at the increased value. The right-of-way should be similarly assessed.

At the same time, it is well for us distinctly to realize what we are doing or are about to do. I have said that all taxes must be paid from income.

These railroad companies have but one source of income—the fares paid by the passengers. Whatever taxes are paid because of increased assessments must be paid out of these fares. The taxes so collected go to governmental uses. If, after paying the taxes, enough is left of the fares to pay *more* than a fair but liberal average profit to the stockholders it is a wrong to the passengers who pay the fares, because the business is a monopoly and it is the duty of government to see to it that only a reasonable charge—*i. e.* one that will allow the stockholders a reasonable average though liberal profit on the money actually invested—is made to the passenger.

But instead of assessing the right-of-way for taxation at a higher rate, there is the alternative of reducing the fares. I am speaking now of economic and not of legal difficulties. If you reduce the fares, you reduce the profits in the same way and to the same extent as if you increased assessment and taxation. The result to the stockholders is the same.

In the one case, the government gets the tax which the stockholder loses; in the other the passenger who rides in the cars saves what the stockholder loses.

It is a question of which will you do? Will you reduce the fares to the advantage of the passenger or assess the right-of-way to the advantage of the government? Given that the stockholder now gets more than a reasonable return for his actual investment and that his return is to be reduced to a reasonable amount, it becomes a controversy wholly between government and the passenger, whether the assessment shall be increased or the fare reduced. Given that the stockholder now gets but a reasonable return for his actual investment, the controversy is between the passenger who must pay an increased fare and the stockholder who otherwise must receive but an inadequate return for his capital invested.

That at present the stockholder is receiving a wholly unreasonable return for his capital actually invested, is conclusively shown by the price of city railroad stocks. They are far above par and it is common knowledge that they do not represent capital actually invested but a lot of water besides. Assume however that they represent actual capital and the amount of premium they command in the market is the measure of the excess of profit for the stockholders which the companies are allowed to make. To the extent of bringing down that price to par for the benefit of either the state or of the passenger, the government has failed to discharge the duty imposed upon it. It is to the disgrace of the state of New York when the stock of any railroad company over which it has jurisdiction continuously sells above par.

Whether, however, in any particular instance the remedy applied should be the imposition of a tax of which the general public would reap the benefit or the lowering of the fares of which the passenger would reap the benefit, is another question which I do not now discuss, although I am free to say that the claim of the passenger appeals to me with very great strength.

What I have endeavored to point out is that there is but one source for the payment of taxes, interest and profits; it is the fares paid by the passengers. There is no other possible source. You can tax the fares or lower the fares. There is nothing else to tax. Every tax falls on them. Only the balance of the fares after payment of taxes can be divided for interest or dividends, and when the dividends are so high that the stock is above par the passenger is paying what he should not be required to pay or the companies be allowed to make him pay.

The CHAIR—I will ask Senator John Ford, author of the Ford Franchise Tax Bill, to continue the discussion.

#### THE FORD TAX BILL.

BY JOHN FORD.

I suppose it is a fair assumption that I am expected to discuss the particular phase of the question involved in the Franchise Tax Law on the statute books of this state. As Professor Seligman has truly said, the purpose was to impose upon the corporations which had obtained for nothing or next to nothing the most valuable species of property in the community, and which were wholly exempt from taxation upon that property, a tax which could not be evaded, and would secure to the public treasury some return for the benefit the corporation received.

Franchises at one time paid taxes by the inclusion of their value in the assess-

ment upon the capital stock of the corporations owning them. One decision of the court recites the fact that corporations paid taxes upon their franchises in that form for forty years without any suggestion that they ought not to be taxed, or that the tax was illegal. But in the case of the People *ex rel.* Coleman *vs.* The Union Trust Company, it was decided that it was improper to include the value of the franchise in the assessment of capital stock. I say, with all respect to the learned jurist who wrote the opinion, that he failed to distinguish the mere corporate franchise from the other elements of the company's property. He was discussing the franchise value, as he called it, of the Union Trust Company, and as has been well said, that is strictly analogous to good will, quite a different thing from a public franchise.

That confusion of thought was carried still further, and when the principles laid down by Judge Finch in the Coleman case were applied subsequently to a case involving the franchise of a street railway company, the court, following the decision in the Coleman case, held that that kind of franchise also could not be taxed. Yet it is a species of real estate, which has been recognized as such since the dawn of the common law. The court of appeals, in 1888, in discussing the Broadway franchise, declared the right of the Broadway Street Railway Company, the grantee of the franchise, was "an estate in perpetuity in Broadway."

When I undertook the task of framing a bill whose purpose was to bring this property within the category of taxable property, I found that there were only two classes of property recognized under the statute, viz., real property and personal property; and the question to decide was, in which class does this property belong? It certainly was not personal property, and it naturally belonged in the category of real property. There was a further reason for putting it there, namely, to establish a tax that could not be evaded, for indebtedness could not be offset against it.

I suppose the franchise tax law, as originally introduced in the legislature, was as plain and concise a bill as was ever introduced there. It consisted of an addition of ten lines to the definition of real estate. It did not create any additional tax or assessment officials. It did not impose any additional expense. It simply brought this class of the most valuable property in the community—the property which is most rapidly increasing in value, the property which cost its possessors nothing or next to nothing, the property which has been exempt from taxation, to the loss of the city of New York, since the decision in the Coleman case, of one hundred million dollars—it brought that property within the category of taxable real property. If the legislature had stopped there, and if Governor Roosevelt had signed the bill in that form, we would not have had this recent decision declaring the law unconstitutional in part. There is no doubt of the constitutionality, the perfect fairness and the practicability of the original bill as it passed, and I may add that what is to-day on the statute book is the original bill stripped by judicial decisions of all the amendments made at the extraordinary session.

I do not think there is any reasonable doubt but that the decision of the Appellate Division in the Third Department left the tax itself perfectly valid upon the statute books and enforceable. Judge Parker, who wrote the prevailing opinion, after discussing the decisions applicable to the case, concludes that so much of the act as takes the power of assessing these properties out of the hands of the local assessors and vests it in a state board is unconstitutional and void.

Now, as a matter of fact, at the time the amendment was made at the extraordinary session, the possible unconstitutionality of that provision was considered, and I was always firmly of the opinion, and Governor Roosevelt was of the opinion, as he expressed it to me, as was also the attorney-general, that if the courts declared that the new section, providing new assessment machinery and taking the assessment of this property out of the hands of the local assessors, was declared unconstitutional, it would leave the law itself valid and enforceable.

Judge Kellogg, in concurring with Judge Parker as to the unconstitutionality of that section of the law, distinctly declared in his opinion that it was perfectly competent for the legislature to provide for the assessment by a state board of the intangible franchise, but that it was unconstitutional to take the tangible property out of the hands of the local assessors who had been assessing it for years and put it into the hands of a state board. Judge Parker, in his opinion, further says that the legislature had the authority to make taxable, and it became and it had always been the duty of the local tax assessors to assess it.

The court of appeals will undoubtedly either declare the whole law constitutional, or, if it sustains the appellate division, it will make clear that the local assessors may assess the franchises. There isn't any doubt in my mind that having the assessments made by the local assessors would make it much more efficacious.

I have gone somewhat into the question of assessments made by the state board of tax commissioners. They have placed an assessment of about \$225,000,000 upon special franchises in the city of New York. As I said before, the larger part of that is the value of the tangible property. One Brooklyn company has sworn that its franchise was worth \$26,000,000, and another company in Manhattan swore that its franchise was worth \$46,000,000. Yet the state board of tax commissioners has placed upon all the public franchises—all the railroad, gas, steam railway, telephone and telegraph and all other public franchises—of the city of New York a total valuation of only about \$70,000,000. It affects steam railroads only in so far as they run through public streets. The New York Central pays a very considerable franchise tax, and so does the Erie Railroad, and so does every other railroad where it gets off its own roadbed and goes on the public streets.

The purpose of putting the assessment in the hands of a state board was to guard against adequate assessments. I am glad that the late decision of the appellate division has wiped out that section. If I had my way, the court of appeals would sustain the decision of the appellate division. There was another important amendment which has also been declared unconstitutional. It provided that payments made to local treasurers should be deducted from the franchise tax. I believed at the time and I have believed ever since that provision was put into the law that it was unconstitutional. If you will consider for a moment, you will see that, when a railroad company takes a public franchise and pays for it, the payment is the purchase price through which they get the property into their possession. Every honest man has to pay for his house before he can get it, and often he pays more than it is worth, but the tax collector never takes that into account, when he comes around to collect taxes. He considers its actual present value, and the owner must pay the tax on that basis. So, when that amendment was proposed, providing that the owner of a public franchise could deduct from his taxes the purchase price of the property, I made up my mind



that that would be unconstitutional unless they permitted every other real estate owner to deduct the purchase price also.

I was on the lookout for something of that kind to be inserted into the bill. The corporations' representatives fairly swarmed about the lobbies, and I felt that somehow they would inject some unconstitutional feature into the measure. I talked with Governor Roosevelt about it, while the bill was under discussion, just as it was approaching final passage in the senate, and I told him I believed that that was unconstitutional, and he disagreed with me. I left him and went to the senate chamber and there consulted with my senatorial colleagues, calling their attention to this feature of the bill. At my instance there was inserted by Senator Brown the clause which provided that any payments in the form of gross receipts or car license fees shall be deducted from the tax—a phrase which limited the deductions to payments in the nature of a tax.

The supreme court in Buffalo has already decided that the deductions from the franchise tax of the percentages of gross earnings paid by the street railways in Buffalo, which they thought ought to be taken from the franchise tax, cannot be deducted, because they were not in the nature of a tax. The effect of that decision will be to save the city of New York five or six hundred thousand dollars a year, which the city was receiving from these companies, and a proportionate amount to the several cities and other localities in the state.

So the two amendments made at the extraordinary session of the legislature have been eliminated from the law by the courts, and there remains on the statute books the original bill in all its pristine simplicity and effectiveness. There can be little doubt that when the assessment of franchises reverts to the local assessors, assessments upon them will be largely increased, and, in my opinion, the revenue to be derived from this source will be increased four-fold.

Professor BEMIS—In reference to Professor Seligman's statement that there are two kinds of values, I think there are three kinds of value instead of two. The real estate value is part of the franchise value sometimes. When Professor Seligman spoke of tangible assets and then of franchise, he might have divided the franchise into what is ordinarily termed good will and what is right-of-way. Now the good will of a newspaper, which has fifty thousand dollars of tangible assets, will sell for a million dollars; nine hundred and fifty thousand dollars is the good will; it represents the accumulated knowledge, the reputation of the management. But I think that in the case of a street railway or a gas company, the difference between what the property will sell for and its tangible assets represents something additional to that good will; for it may be a question, in view of the growing discontent in the community, whether they have much good will left in many cities, whether most of the value is not right-of-way. Perhaps we had better divide what Professor Seligman has called franchise into right-of-way value and good will. In the case of street railways and gas companies, the so-called good-will value is very small in comparison with the right-of-way value. The right-of-way value of a steam railway is large, it is more valuable than the land on which it is located. The fact that you may cut a continuous strip of land through the state is of enormous value. That was the point, Mr. Chairman, which I desire to bring out.

Mr. HALE—Don't you think, Senator Ford, that the franchise is taxable under common law without your bill. It is an estate in land?



Senator FORD—I think that it ought to be, but the courts have held otherwise.

Professor PARSONS—I have only just one word in reference to what Mr. Peckham has told us—that the taxes have to come out of the user. If the street railway cars are taxed, and gas and electric lights are taxed, the company cannot raise that fund but from the user. In the case of a franchise tax, that would have to be paid by the company, and could not be thrown back upon the user; unless the company can raise rates, the taxes cannot be thrown back upon the user.

Mr. Peckham told us that the earnings of no company ought to be more than the usual fair earnings. That leaves no return whatever for the extra energy, skill and business ability that a particular company may have manifested. You have killed, you have destroyed the life of business, if you make your return a fixed return instead of a fair contingent return. That is the difference between a fair contingent return and a dead level.

I want to ask Professor Seligman one question. Does he not think it would be fairer to capitalize at 5 per cent. the franchise value remaining under his second method instead of at 7, in order that the capitalization of the franchise may be at the same rate that the—

Professor SELIGMAN—I was simply quoting from the report of the Michigan Tax Commission on that point; that broad method was suggested by the commission at the suggestion of Professor Adams, who was employed by the governor to ascertain the value of franchises, the intangible property. I do not care to speak for him, but to the best of my recollection there was little doubt as to what would be a perfectly fair rate to capitalize at, and to give the corporations the benefit of the doubt, he proposed to give 7 per cent. instead of 5 per cent. value. There is a good deal to be said in favor of capitalizing each at the same rate, but, as I have just stated, it seemed to the statistician in charge that, while you could not make any mistake about the tangible physical property, the exact proportionate amount of earnings to the intangible, non-physical property cannot be so accurately ascertained, and for that reason he wanted to be generous.

While I am on my feet, Mr. Chairman, I would like to add one word to what has been said regarding the contention of Mr. Peckham, although when it comes to practical propositions there would probably be very little difference of opinion between us. Mr. Peckham looks at it primarily from the legal rather than the economic point of view. When he says the corporations should be allowed only to retain a certain amount of the ordinary kind of capital, the question arises to the economist: What capital? Should it be the capital cost of construction, or the capital stock, or the capital stock plus the bonds?

When you say a corporation should not be taxed, or that it shall receive only fair earnings on its property, you have not told what the property is. Thus we are compelled to go back to the fundamental question, and that is, How are you going to measure the property? Are you going to tax the capital invested? The question then comes up, Does that mean the actual money put in it? That would bring up that question, How will we settle what money has been invested?

As regards the interesting talk by the author of the Ford Franchise Tax Bill, I would like to call attention to the fact that this problem is not peculiar to New York, and I was trying to treat it not so much from the New York point of view as from the general point of view. Here in New York, the most effective method was to declare the franchise to be real estate. In other states in this country it

would not be necessary. In Michigan and other states it is entirely disconnected from the problem of real estate or personal property valuation; and after all we must get down to bed rock in the discussion, which is really what is the method of estimating the capital of a corporation, so far as those earnings are derived from something over and above the tangible physical property.

Mr. FILENE—In order to limit the returns of corporations holding public franchises, two years ago in Massachusetts we passed a law that traction companies should turn over to the state all income above 8 per cent., all after paying 8 per cent. dividends. The law seemed promising, but the powers that were interested succeeded in getting a little joker into that law in the shape of one word. They inserted the word "operating," and the result is that not one dollar has come to the state from that source, and the moment a company approaches the danger point of paying more than 8 per cent. it becomes a leased property.

Mr. BARNES—I assume if I understand Senator Ford correctly, that the franchise is treated as real property with the tangible property in the streets, for the reason among others that the assessor may have something to go upon to fix the value of the franchise. Is that true?

Senator FORD—I do not know what the reason is or why it was done, but it was done. That is about the only answer I can give.

Mr. BARNES—What I am getting at is this. Is it not true that the experts appointed by the state are better able to get at the value of a franchise than the local assessors? I suppose perhaps that it is not true in the city of New York, where there are large interests to tax, but isn't it true in the smaller cities that the local men are liable to know nothing of the value of an electric company or a street railway; isn't it true that you would have a great deal of difficulty in getting a fair valuation made; and isn't it also true that the local assessors may be tempted in some instances unduly to tax the foreign capital invested in the locality?

Senator FORD—The difficulties suggested are inherent in any tax system. There is difficulty in assessing this property, and there is difficulty in assessing all other property. That is true of assessors whether local or state. Now, the tax law says that "all docks and piers," meaning, of course, the material structure, "shall be assessed as real estate, including the value of the right to collect craneage, wharfage and dockage thereof." There is a public franchise that has been taxed for years and years. It is possible that the state authorities can assess it better than the local authorities, and it is possible that the national government may come in and make a provision for a more accurate assessment; but there are many other species of property assessed as franchises, quarries, the right to cut standing timber, underbrush and so on, and numberless other things, that are extremely difficult to assess, already enumerated in the tax law and assessed for years and years. But the difficulty of assessment is not a valid argument against a tax upon them.

There is a well-recognized, simple method of getting at the value of these franchises. They are sold, or portions of them are sold, upon the stock exchange every day. Now, what is the method of getting at the value? Most of these securities will, of course, show great fluctuations, but you must not take extremes either way as the basis of your valuations, but over an extended period; take the average daily quotations, add them together and divide them by the number of days, and you have the fair average value of that security. That is a simpler

method and more accurate than any other method that exists for the valuation of any other kind of property. Now, as to such property as is not sold on the exchange. The suggestion made by Professor Seligman that you take the income value instead of the capital value, discriminates in this instance. One never inquires about the income from any other form of real estate. The real estate that is held and produces no income is taxed. Then why should this real estate be singled out and exempted from taxation in so far as it does not return any income? The market value is as accurate as any measure.

Mr. HEINEMAN—I have listened with a great deal of attention to the remarks made on this subject, but I am in doubt whether the idea is to place franchises of railroads, etc., on the same basis as real estate or not. If they were placed on the same basis as other values, then, of course, as Senator Ford has said, the fairest way would be to get the stock exchange valuations. That means that the original buyer invests, we will say, one hundred dollars, but if the price of the stock is one hundred and forty, the assessable value is one hundred and forty. On the other hand, Judge Peckham would say no, we will make them reduce their fares, so that the value returns to one hundred; and instead of a five-cent fare we will have a three-cent fare, or a two-cent fare, or whatever it is, so that a man can only make a reasonable percentage on the original investment of one hundred. But suppose I buy real estate and hold the property for ten years' time, and at the end of that time it is worth more than one hundred, what then? In other words, you discriminate between two classes of property.

In as much as this Convention is about to conclude its sessions, I beg leave to offer a resolution in which I believe every delegate here will concur:

The National Municipal Ownership and Public Franchise Convention being about to adjourn, takes occasion hereby to make of record its belief that the calling together of this gathering has been timely and will result in substantial public benefit, and it therefore feels called upon to express and hereby does express its unqualified thanks to the Committee on City Affairs of the New York Reform Club for its invitation in calling the convention; to the Advisory Committee thereof; to Mr. John G. Agar, the Chairman of the Committee, and the presiding officer of this convention; to Mr. John Martin, its Secretary, to whose activity the success of the convention is in great part due; to the gentlemen who have prepared and delivered addresses, and particularly to Mr. C. R. Bellamy, of Liverpool, who has crossed the ocean specially to attend and address the convention; to the Editor of MUNICIPAL AFFAIRS, in which the proceedings are to be published; to the representatives of the local press for their careful and extended reports of the daily proceedings; lastly, but with the utmost measure of appreciation to the New York Reform Club for the welcome and continued hospitality which have been so generously extended by it to each and every member of this convention.

The above resolution was put by Mr. Heineman and unanimously carried.

The Chair declared the meeting adjourned *sine die*.

## BIBLIOGRAPHY.

The following subject index is intended to continue the work begun in the first number of MUNICIPAL AFFAIRS. The March, 1901, issue was entirely devoted to "A Bibliography of Municipal Problems and City Conditions," which contained all of the indices previously published, revised, rearranged and made complete to January 1, 1901. So far as possible, all books, pamphlets, reports and magazine articles of interest to students of city government which have appeared in the last four months—September to December 31, 1902—are included in the following list. Future numbers will contain similar indices for each preceding quarter.

In the arrangement of the references, the following plan has been adopted: All relating to any one city have been grouped under that city. Thus, references on Sewage Disposal in Berlin are found under **Berlin**, subhead Sewage Disposal. The same is true as to countries. The references to Water Supplies in the United States, for instance, are under **United States**, subhead Water Works. In each case, cross references to the city and country have been placed under the main topic. Thus, for example, immediately following the head **Lighting**, there is a list of the cities and countries under which is found additional material on Lighting, but which is not general in character, relating only to the city or country referred to.

Upon classifying the material according to this plan, a small number of unclassifiable titles are found which resist every device of the bibliographer's art; titles referring neither to any particular city, nor country, nor single topic. These, together with the important general works, have been given special prominence by being grouped at the beginning of the Index under the rubric **City Government and General Works**. A similar plan has been followed in each country and city.

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**JOHN DEWITT WARNER**—Born in 1851, in Schuyler County, New York. Graduated from Cornell in 1872. Was professor for two years at Ithaca Academy, and two years at Albany Academy. Studied law at Albany Law School, and admitted to the bar in 1876. Has since practiced in New York City. Elected to the Fifty-second and Fifty-third Congresses. Was chairman of the House sub-committee to investigate the sweating system. Secured the "free-sugar" amendment to the Wilson tariff bill. Was one of the founders of the New York Reform Club, and its President, 1897-98; tariff reform editor of the *New York Weekly World* during the campaign of 1892; chairman Reform Club's Tariff Committee, 1889-91; chairman Sound Currency Committee, 1895-96; chairman of Committee on City Affairs, 1897-99. Is trustee of Cornell University, president of the Municipal Art Society, and president of the Art Commission of this city. Has done extensive editorial work, and has contributed many articles upon literary, political, financial and economic subjects.

**CHARLES WALDO HASKINS**—Born in Brooklyn, 1852, and died in New York City January 9, 1903. Was the first dean and professor of auditing and of the history of accountancy in the New York University School of Commerce, Accounts and Finance; president of the Federation of Societies of Public Accountants; president of the New York State Society of Certified Public Accountants, and president of the Board of Examiners; and senior member of the accounting firm of Haskins & Sells. In 1893 he with Mr. Sells were appointed to revise the accounting system of the United States, and their recommendations were adopted. At the close of the Spanish-American War they were selected by the United States to investigate the finances of Havana and Cuba. Early in 1901 the Treasury Department of the United States Government engaged the firm to examine and report upon the system of accounts of the Bureau of the Mint. The finances of many other cities, such as Brooklyn, New York and Chicago, have been investigated. Mr. Haskins has written widely upon financial and accounting subjects.

**ROBERT P. PORTER**—Born in Norfolk, England, 1852, and came to the United States when 14 years of age. Attended school in Illinois, and on completion of education began journalism on the *Chicago Inter Ocean* in 1872. Has made a specialty of economic questions, and in 1879 was appointed by President Hayes to aid in the



work of the Tenth Census, under Professor Francis A. Walker; had charge of the statistics of Wealth, Debt and Taxation, and of Railroads. In 1882 was appointed by President Arthur member of the Tariff Commission and was afterward elected secretary of that Commission and had much to do with the preparation of the report and framing of the Tariff Bill which became a law in 1883. In that year Mr. Porter joined the editorial staff of the *New York Tribune*, and was sent abroad, writing a series of industrial letters from the principal European countries. On his return became one of the editors of the *Philadelphia Press*, remaining until December, 1887, when he founded the *New York Press*. In 1889 was appointed by President Harrison superintendent of the Eleventh Census, and in 1893 returned to the *New York Press*. In 1895 was sent to Japan by the Manufacturers' Association, making a report on its resources and industries. Wrote on economic topics for newspapers, magazines and reviews until 1898, when President McKinley appointed him Special Commissioner to Cuba and Porto Rico, and he framed the tariff for those islands. Conducted the negotiations with General Gomez which led to the disbandment of the Cuban army. Has resumed his studies in European countries, especially interesting himself in railways and electrical developments in England and on the Continent. His other economic books and essays are as follows: *Local Government at Home and Abroad*, 1879; *The West*, 1880; *Bread Winners Abroad*; *Free Trade Folly*; *Commerce and Industries of Japan*; *Life of William McKinley*; *Municipal Ownership and Operation of Street Railways in England*; *Municipal Ownership at Home and Abroad*; *Industrial Cuba*; *Other People's Money*; and papers and addresses read before the London Chamber of Commerce, Chesterfield Chamber of Commerce, etc., London School of Economics, etc.

ROBERT DONALD—Born in Scotland, 1860. Engaged for many years on daily press in Edinburgh and London, and acted as correspondent in Paris. Spent one year in United States (New York and Washington). Established *London*, "a journal of civic and social progress," eight years ago as an exponent of progressive municipal movement in the metropolis. This paper did good work in exposing abuses, attacking monopolies and advocating a progressive policy. Its influence soon extended beyond the city from which it took its name, and was renamed *The Municipal Journal*, and its scope widened. Has edited the *Municipal Year Book*, describing work of all municipalities in Great Britain, and *London Manual*, a citizens' handbook to the metropolis. Has contributed to reviews on municipal subjects and is chief writer on such matters in English press.

EDWARD T. HEYN—Journalist and foreign correspondent for American magazines and periodicals. Has lived for several years in Berlin and other Continental cities.

VICTOR ROSEWATER—A student a Johns Hopkins University and Columbia University, where he held a university fellowship in political science, receiving the degree of Ph. D. in 1893. Wrote upon municipal ownership of electric lighting plants in the *Independent* of March 20, 1890, which paper precipitated an active cross fire between the representatives of the franchise corporations and the advocates of public control. A second paper appeared in the *Independent* of May 5 of the same year. Two more papers were published in the *Independent* in 1892, a review of British electric lighting legislation in the *Columbia Law Times*, 1893, and an analysis of the cost statistics of electric lighting in the *American Statistical Association Quarterly*, 1893. Another paper, taking an inventory of the progress made in the last ten years, was published in

the *Independent* January 8, 1903. Has also written on other subjects in the economic field. *Special Assessments* appeared in the Columbia College Studies in 1892. Is managing editor of *The Bee*, Omaha, a managing director of the Omaha Public Library, a member of the American Economic Association, of the American Library Association and of the general committee of the taxation department of the National Civic Federation. In 1896 was appointed to a short-term vacancy on the board of regents for the University of Nebraska.

**JAMES BLAKE CAHOON**—Was graduated from the United States Naval Academy in 1879, and served in the navy until 1889, when he retired owing to a serious injury to his eyesight while conducting searchlight experiments. Until 1895 was connected with the Thomson-Houston Electric Company and the General Electric Company, into which the former was merged. For four years was general manager of the electric light, gas, water and street railway companies of Elmira, which were, under his management, completely reorganized and made paying properties. At present is a consulting engineer and vice-president of the Oneida Light and Power Company. Has been president of the National Electric Light Association, and is now its secretary.

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EDWARD M. SHEPARD—Born in New York, 1850. Graduated from the College of the City of New York in 1869. Is a prominent lawyer in New York City, and has for many years been connected with reform movements, especially civil service reform. Is a Democrat in politics, and was nominated by the Democratic Party for mayor of New York in 1901; at present is the counsel for the Rapid Transit Commission.

LOUIS D. BRANDEIS—A prominent lawyer of Boston who has played a leading part in all franchise questions in Boston and Massachusetts.

WILLIAM R. HILL—Is chief engineer to the Aqueduct Commission of New York City. Was formerly engineer of the Syracuse municipal water works and consulting engineer for several private companies.

CHARLTON, T. LEWIS—Born in West Chester, Pa., 1834. Graduated from Yale University, 1853, receiving the degree of Ph. D. from New York University. Was professor in the State Normal University of Illinois and Troy University from 1856 to 1861. Deputy Commissioner of the Internal Revenue, 1863-64. Appointed to represent the United States at the Paris Congress on Prisons in 1895. Has practiced law in New York City for many years. Has written a *History of Germany*, several Latin dictionaries and many essays and addresses, including a number upon municipal franchises.

ALLEN RIPLEY FOOTE—Born in 1842, N. Y. State. Served throughout the War of 1861-65. Expert in statistics of electrical industries on the Eleventh Census. Secretary for one year of the National Electric Light Association. Has published many books upon franchise questions, and is now editor of *Public Policy*, Chicago.

EDWIN R. A. SELIGMAN—Born in New York in 1861. Graduated from Columbia University in 1879. Studied at the universities of Berlin, Heidelberg, Geneva and Paris. Has been professor of political economy and finance at Columbia University since 1891. Is president of the American Economic Association, and a member of the Committees of Seventy, Two Hundred and Fifty, and Fifteen. His principal works are *Shifting and Incidence of Taxation*, *Progressive Taxation in Theory and Practice*, and *Essays in Taxation*.

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